State of Rhode Island and Providence Plantations Contract Offer

RIVIP GENERATED BIDDER CERTIFICATION COVER FORM

SECTION 1 - VENDOR INFORMATION

Bid/RFP Number:	7448088A1
Bid/RFP Title:	RFP - ARRA - CEMENT WATER MAIN REPLACEMENTS & WATER BOOSTER PUMP STATI(
Opening Date & Time:	1/24/2011 3:00 PM
RIVIP Vendor ID #:	1524
Vendor Name:	Boyle & Fogarty Construction
Address:	2 Industrial Drive South Unit 1 Smithfield, RI 02917 USA
Telephone:	(401) 231-0007
Fax:	(401) 231-4410
E-Mail:	mark@boyleandfogarty.com
Contact Person:	John Fogarty
Title:	Vice President
R.I. Foreign Corp #:	

NOTICE TO VENDORS

Effective January 1, 2011 all public works project related bids or proposals exceeding one million ($1,000,000) dollars are required to include a "public copy". All agency contract solicitations, requests for proposals, invitations for bids, etc. shall state that any bid or proposal that exceeds one million ($1,000,000) dollars must include a copy to be available for public inspection upon the opening of the bids. Any bid or proposal in excess of one million ($1,000,000) dollars which does not include a copy for public inspection shall be deemed to be non-responsive. For further information, please see R. I. Gen. Laws §37-2-18 (P.L. 221) http://www.rilin.state.ri.us/PublicLaws/law10/law10221.htm and Purchasing Rules & amendment at http://www.purchasing.ri.gov/Notices2.aspx.

In addition, the Division of Purchases has promulgated proposed regulations pursuant to R.I. Gen. Laws § 37-2-18 that implements the "public copy" requirement. Public hearing on the proposed regulations was held on Friday, December 17, 2010. The proposed regulations will become final on January 11, 2011. For further information please visit www.sos.ri.gov.

NOTE: AWARD OF CONTRACTS AND PURCHASE ORDERS SHALL BE SUBJECT, AT THE DISCRETION OF THE PURCHASING AGENT, TO THE OFFEROR COMPLETING AN ON-LINE RIVIP REGISTRATION at www.purchasing.ri.gov. It is THE RESPONSIBILITY OF THE VENDOR to make on-line corrections/updates using the Vendor maintenance program on the RI Division of Purchases Web Site.

SECTION 2 - REQUIREMENTS

ALL OFFERS ARE SUBJECT TO THE REQUIREMENTS, PROVISIONS AND PROCEDURES CONTAINED IN THIS THREE-PAGE CERTIFICATION FORM. Offerors are expected to READ, SIGN and COMPLY with all requirements. Failure to do so may be grounds for disqualification of the offer contained herein.

Section 2.1 - RULES FOR SUBMITTING OFFERS

2.1A. This CERTIFICATION FORM MUST BE ATTACHED IN ITS ENTIRETY TO THE FRONT OF THE OFFER and shall be considered an integral part of each offer made by a vendor to enter into a contract with the State of Rhode Island, Division of Purchases. As such, submittal of the entire Bidder Certification Cover Form, signed by a duly authorized representative of the offeror attesting that he/she (1) has read and agrees to comply with the requirements set forth herein and (2) to the accuracy of the information provided and the offer extended, is a mandatory part of any contract award.

To assure that offers are considered on time, each offer must be submitted with the specific Bid/RFP/LOI number (provided above), date and time of opening marked in the upper left hand corner of envelope. Each bid/offer must be submitted in separate sealed envelopes.

A complete, signed (in ink) offer package, must be delivered to the division of purchases (via any mail or messenger service) by the time and date specified for the opening of responses in a sealed envelope.

Bids must be submitted on the RI bid solicitation forms provided, indicating brand and part numbers of items offered, as appropriate. Bidders must submit detailed cuts and specs on items offered as equivalent to brands requested WITH THE OFFER. Bidders must be able to submit samples if requested.

Mail To: Division of Purchases, One Capitol Hill, Second Floor, Providence, RI 02908-5855

Documents misdirected to other State locations or which are not present in the Division of Purchases at the time of opening for whatever cause will be deemed to be late and will not be considered. For the purposes of this requirement, the official time and date shall be that of the time clocks in either the mail sorting or reception areas of the Division of Purchases. Postmarks shall not be considered proof of timely submission.

2.1B. RIVIP SOLICITATIONS. To assure maximum access opportunities for users, public bid/RFP solicitations shall be posted on the RIVIP for a minimum of seven days and no amendments shall be made within the last five days before the date an offer is due. When copies of plans and specifications are too large to make available on-line and are issued with a requirement for a refundable deposit, vendors on the known lists of depositors will receive direct notification of amendments. Except when access to the Web Site has been severely curtailed and it is determined by the State Purchasing Agent that special circumstances preclude extending a solicitation due date, requests to mail or fax hard copies of solicitations will not be honored. When the result of an Internet solicitation is unsuccessful, the State of Rhode Island will cancel the original solicitation and resolicit the original offer directly from vendors.

2.2. PRICING. Offers are irrevocable for sixty (60) days from the opening date (or such other extended period set forth in the solicitation) and may not be withdrawn, except with the express permission of the State Purchasing Agent. All pricing will be considered to be firm and fixed unless otherwise indicated. The State of Rhode Island is exempt from Federal excise taxes and State Sales and Use Taxes. Such taxes shall not be included in the bid price. PRICES QUOTED ARE FOB DESTINATION.

2.3. DELIVERY and PRODUCT QUALITY. All offers must define delivery dates for all items; if no delivery date is specified, it is assumed that immediate delivery from stock will be made. The contractor will be responsible for delivery of materials in first class condition. Rejected materials will be at vendor's expense.

2.4. PREVAILING WAGE, OSHA and APPRENTICESHIP.

2.4.1 Prevailing Wage and OSHA Safety Training Requirements. The provisions of the State labor laws and OSHA Safety Training, including but not limited to Rhode Island General Laws 37-13-1 et seq. and 28-20-1 et seq., shall apply for all public works contracts. Prevailing wage rates are posted in the information section of the RIVIP. The RI Department of Labor and Training should be contacted for regulatory requirements.

2.4.2 Apprenticeship. Rhode Island General Laws §37-13-3 1 requires all general contactors and subcontractors who perform work on any public works contract awarded by the state valued at one million dollars ($1,000,000) or more shall employ apprentices required for the performance of the awarded contract. The number of apprentices shall comply with the apprentice to journeyman ratio for each trade approved by the apprenticeship council of the department of labor and training.

2.5. PUBLIC RECORDS. Offerors are advised that all materials submitted to the State for consideration in response to this solicitation will be considered without exception to be Public Records pursuant to Title 38 Chapter 2 of the Rhode Island General Laws, and will be released for inspection immediately upon request once an award has been made. Offerors are encouraged to attend public bid/RFP openings to obtain information; however, bid/RFP response summaries may be reviewed after award(s) have been made by using the RIVIP at any time or appearing in person at the Division of Purchases Mondays through Fridays between 8:30 a.m. and 3:30 p.m. Telephone requests for results will not be honored. Written requests for results will only be honored if the information is not available on the RIVIP.

SECTION 3 - AWARD DETERMINATION

Award will be made to the responsive and responsible offeror quoting the lowest net price in accordance with specifications, for any individual item(s), for major groupings of items, or for all items listed, at the State's sole option.

3.1. BID SURETY. Where bid surety is required, bidder must furnish a bid bond or certified check for 5% of the bid total with the bid, or for such other amount as may be specified. Bids submitted without a required bid surety will not be considered.

3.2. SPECIFICATIONS. Unless specified "no substitute," product offerings equivalent in quality and performance will be considered (at the sole option of the State) on the condition that the offer is accompanied by detailed product specifications. Offers which fail to include alternate specifications may be deemed nonresponsive.

SECTION 4 – CONTRACT PROVISIONS.

4.1. VENDOR AUTHORIZATION TO PROCEED.

4.1A. When a purchase order, change order, contract/agreement or contract/agreement amendment is issued by the RI Division of Purchases, no claim for payment for services rendered or goods delivered contrary to or in excess of the contract terms and scope shall be considered valid unless the vendor has obtained a written change order or contract amendment issued by the Division of Purchases PRIOR TO delivery.

4.1B. Any offer, whether in response to a solicitation for proposals or bids, or made without a solicitation, which is accepted in the form of an order OR Pricing Agreement made in writing by the Purchasing Agent, or a state official with purchasing authority delegated by the Purchasing Agent, shall be considered a binding contract.

4.2. REGULATIONS, GENERAL TERMS AND CONDITIONS GOVERNING STATE CONTRACTS. This solicitation and any contract or purchase order arising from it are issued in accordance with the specific requirements described herein, and the State's Purchasing Laws and Regulations and other applicable State Laws. The Regulations, General Terms and Conditions are incorporated into all state contracts. These regulations and basic information on How To Do Business with the State of Rhode Island are posted on the Rhode Island Vendor Information Program Website (www.purchasing.ri.gov).

4.2A. ARRA SUPPLEMENTAL TERMS AND CONDITIONS. Contracts and sub-awards funded in whole or in part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto, such contracts and sub-awards, shall be subject to the Supplemental Terms and Conditions For Contracts and Sub-awards Funded in Whole or in Part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto located on the Division of Purchases website at www.purchasing.ri.gov.

4.3. EQUAL EMPLOYMENT OPPORTUNITY. Compliance certificate and agreement procedures will apply to all awards for supplies or services valued at $10,000 and more. Minority Business Enterprise policies and procedures, including subcontracting opportunities as described in Title 37 Chapter 14.1, of the Rhode Island General Laws, also apply.

4.4. PERFORMANCE BONDS. Where indicated, successful bidder must furnish a 100% performance bond and labor and payment bond for contracts subject to Title 37 Chapters 12 and 13 of the Rhode Island General Laws. All bonds must be furnished by a surety company authorized to conduct business in the State of Rhode Island. Performance bonds must be submitted within 21 calendar days of the issuance of a tentative notice of award.

4.5. DEFAULT and NON-COMPLIANCE. Default and/or non-compliance with the RIVIP requirements and any other aspects of the award may result in withholding of payment(s), contract termination, debarment, suspension, or any other remedy necessary that is in the best interest of the state.

4.6. COMPLIANCE. Vendor must comply with all applicable federal, state and local laws, regulations and ordinances.

4.7. SPRINKLER IMPAIRMENT AND HOT WORK. The Contractor agrees to comply with the practices of the State's insurance carrier for sprinkler impairment and hot work. Prior to performing any work, the Contractor shall obtain the necessary information for compliance from the Risk Management Office at the Department of Administration or the agency for which work will be performed.

SECTION 5 – CERTIFICATIONS AND DISCLOSURES

ALL CONTRACT AWARDS ARE SUBJECT TO THE FOLLOWING DISCLOSURES & CERTIFICATIONS

Offerors must respond to every disclosure statement.

A person authorized to enter into contracts must sign the offer and attest to the accuracy of all statements.

Indicate Yes (Y) or No (N):

N 1. Has your firm (or any principal) been subject to any of the following findings by the Federal Government, the State of Rhode Island or any other jurisdiction? Suspension, Debarment, Indictment, Criminal Conviction. CIRCLE APPROPRIATE ITEM(S).

N 2. Has your firm (or any principal) been fined more than $5000 for a single violation by the Rhode Island Department of Environmental Management for violation of Rhode Island Wetlands law?

Y 3. I/we certify that I/we will immediately disclose, in writing, to the Chief Purchasing Officer any potential conflict of interest, which may occur during the course of the engagement authorized pursuant to this contract.

Y 4. I/we acknowledge that, in accordance with Chapter 37-2-54(3) of the Rhode Island General Laws "no purchase or contract shall be binding on the state or any agency thereof unless approved by the Department [of Administration] or made under general regulations which the Chief Purchasing Officer may prescribe", including change orders and other types of contracts and under State Purchasing Regulation 8.2.1.1.2, "any alleged oral agreement or arrangements made by a bidder or contractor with any agency or an employee of the Office of Purchases may be disregarded and shall not be binding on the state".

Y 5. I/we certify that the above vendor information is correct and complete.

Y 6. I/we certify that I or my firm possesses all licenses required by Federal and State laws and regulations as they pertain to the requirements of the solicitation and offer made herein and shall maintain such required license(s) during the entire course of the contract resulting from the offer contained herein and should my/our license lapse or be suspended, I/we shall immediately inform the Rhode Island State Purchasing Agent in writing of such circumstance.

Y 7. I/we certify that I/we will maintain required insurance during the entire course of the contract resulting from the offer contained herein and should my/our insurance lapse or be suspended, I/we shall immediately inform the Rhode Island State Purchasing Agent in writing of such circumstance.

Y 8. I/we certify that I/we understand that falsification of any information herein or failure to notify the Rhode Island State Purchasing Agent as certified herein may be grounds for suspension, debarment and/or prosecution for fraud.

Y 9. I/we acknowledge that the provisions and procedures set forth in this three-page form apply to any contract arising from this offer.

Y 10. I/we acknowledge that I/we understand the State's Purchasing Laws (37-2 of the General Laws of Rhode Island) and Purchasing Regulations and General Terms and Conditions available at the Rhode Island Division of Purchases Website (www.purchasing.ri.gov) apply as the governing conditions for any contract or purchase order I/we may receive from the State of Rhode Island, including the offer contained herein.

Y 11. **I/we certify that I/we have registered to utilize the E-Verify program (www.dhs.gov/E-Verify) to ensure compliance with federal and state law. I understand and agree that I am required to continue to utilize the services of the E-Verify program for as long as I continue to do business with the State of Rhode Island. I further understand that my failure to continue to utilize the services of the E-Verify program will adversely affect my ability to continue to do business with the State of Rhode Island and my ability to do business with the State of Rhode Island in the future.**

IF YOU HAVE ANSWERED "YES" TO QUESTIONS #1 – 2 OR IF YOU ARE UNABLE TO CERTIFY YES TO ITEMS #3 – 11 OF THE FOREGOING, PROVIDE DETAILS/EXPLANATION BELOW AND/OR IN AN ATTACHED STATEMENT. INCOMPLETE CERTIFICATION FORMS SHALL BE GROUNDS FOR DISQUALIFICATION OF OFFER.

Signature below commits vendor to the attached offer and certifies (1) that the offer has taken into account all solicitation amendments, (2) that the above statements and information are accurate and that vendor understands and has complied with the requirements set forth herein. When delivering offers in person to One Capitol Hill, vendors are advised to allow at least one hour additional time for clearance through security checkpoints.

J. P. Fogarty

Vendor's Signature (Person authorized to enter into contracts; signature must be in ink.)

Date JANUARY 24, 2011

JOHN P. FOGARTY - VICE PRESIDENT

Name and Title of company official signing offer

Print

Revised: 12/29/10

Request for Quote

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ONE CAPITOL HILL
PROVIDENCE RI 02908

CREATION DATE : 03-DEC-10
BID NUMBER: 7448088
TITLE: CEMENT WATER MAIN REPLACEMENTS AND WATER BOOSTER PUMP STATIONS AT RIC

BUYER: Moynihan, Jerome D
PHONE #: 401-574-8119

BID CLOSING DATE AND TIME:29-DEC-2010 11:00:00

BILL TO
RIC-PURCHASING
600 MOUNT PLEASANT AVENUE
PROVIDENCE, RI 02908
US

SHIP TO
RIC SPECIAL INSTRUCTIONS
SEE BELOW
SEE BELOW, RI N/A
US

Requistion Number: 1201642

Line	Description	Quantity	Unit	Unit Price	Total
	THERE WILL BE A PRE-BID CONFERENCE ON 12/14/10 AT 10:00 AM AT RI COLLEGE, PHYSICAL PLANT (2ND FLOOR), 600 MOUNT PLEASANT AVENUE PROVIDENCE, RI BIDDER IS REQUIRED TO PROVIDE A BID SURETY IN THE FORM OF A BID BOND, OR A CERTIFIED CHECK PAYABLE TO THE STATE OF RHODE ISLAND, IN THE AMOUNT OF A SUM NOT LESS THAN FIVE PERCENT (5%) OF THE BID PRICE. BID SURETY MUST BE ATTACHED TO THE BID FORM. THE SUCCESSFUL BIDDER WILL ALSO BE REQUIRED TO FURNISH PERFORMANCE AND LABOR AND PAYMENT BONDS AT TIME OF TENTATIVE CONTRACT AWARD ***				
1	TOTAL PRICE TO DESIGN / BUILD ASBESTOS CEMENT WATER MAIN REPLACEMENTS AND WATER BOOSTER PUMP STATIONS - ARRA FUNDED - RIC	1.00	Each	3,420,000.00	3,420,000.00

*DOES NOT INCLUDE CONTINGENCIES

Delivery: _____

Terms of Payment: _____

It is the Vendor's responsibility to check and download any and all addenda from the RIVIP. This offer may not be considered unless a signed RIVIP generated Bidder Certification Cover Form is attached and the Unit Price column is completed The signed Certification Cover Form must be attached to the front of the offer

Rhode Island College

Asbestos Cement Water Main Replacement

RFP #7448088

Clarification on Pump Station Requirements

& Revised Fee Form

January 19, 2011

Fee Form

Lump Sum Fee – Segment 1	$ 490,000.00 (Four Hundred Ninety Thousand Dollars and Zero Cents)
Contingency Segment 1 – (10%)	$ 49,000.00 (Forty-Nine Thousand Dollars and Zero Cents)
Lump Sum Fee – Segment 2	$ 510,000.00 (Five Hundred, Ten Thousand Dollars and Zero Cents)
Contingency Segment 2 – (10%)	$ 51,000.00 (Fifty-One Thousand Dollars and Zero Cents)
Lump Sum Fee – Segment 3	$ 400,000.00 (Four Hundred Thousand Dollars and Zero Cents)
Contingency Segment 3 – (10%)	$ 40,000.00 (Forty Thousand Dollars and Zero Cents)
Lump Sum Fee – Segment 4	$ 465,000.00 (Four Hundred, Sixty-Five Thousand Dollars and Zero Cents)
Contingency Segment 4 – (10%)	$ 46,500.00 (Forty-Six Thousand, Five Hundred Dollars and Zero Cents)
Lump Sum Fee – Segment 5	$ 295,000.00 (Two Hundred, Ninety-Five Thousand Dollars and Zero Cents)
Contingency Segment 5 – (10%)	$ 29,500.00 (Twenty-Nine Thousand, Five Hundred Dollars and Zero Cents)
Lump Sum Fee – Two Pump Stations and Emergency Generator- Base Bid	$ 1,260,000.00 (One Million, Two Hundred Sixty Thousand Dollars and Zero Cents)
Contingency Pump Stations and Emergency Generator- Base bid – (10%)	$ 126,000.00 (One Hundred, Twenty-Six Thousand Dollars and Zero Cents)
Lump Sum Fee – Two Pump Stations and Emergency Generator- Add Alternate 1	$ 420,000.00 (Four Hundred, Twenty Thousand Dollars and Zero Cents)
Contingency Pump Stations and Emergency Generator- Add Alternate 1 – (10%)	$ 42,000.00 (Forty-Two Thousand Dollars and Zero Cents)
Rock Removal (ledge)	$150.00 (One Hundred Fifty Dollars and Zero Cents) per cubic yard
Rock Removal (boulders)	$ 30.00 (Thirty Dollars and Zero Cents) per cubic yard

Rhode Island College

Asbestos Cement Water Main Replacement

RFP #7448088

Clarification on Pump Station Requirements

& Revised Fee Form

January 19, 2011

Processed Gravel	$ 24.00 (Twenty-Four Dollars and Zero Cents) per cubic yard
Remove and dispose of AC water main – 8-inch diameter	$ 4.00 (Four Dollars and Zero Cents) per linear foot
Remove and dispose of AC water main – 10-inch diameter	$ 4.00 (Four Dollars and Zero Cents) per linear foot
Remove and dispose of AC water main – 12-inch diameter	$ 4.00 (Four Dollars and Zero Cents) per linear foot
Temporary water main – 6 – inch diameter	$ 4.00 (Four Dollars and Zero Cents) per linear foot
Temporary water main – 8 – inch diameter	$ 4.00 (Four Dollars and Zero Cents) per linear foot
Temporary water main – 10 – inch diameter	$ 4.00 (Four Dollars and Zero Cents) per linear foot
Temporary water main – 12 – inch diameter	$ 4.00 (Four Dollars and Zero Cents) per linear foot
Test Pits	$ 600.00 (Six Hundred Dollars and Zero Cents) each

Note: Fees should be provided in numbers (i.e. $100) and writing (i.e. one hundred dollars and zero cents).

Listing of Proposed Subcontractors

Company	Type of Work To Be Completed (i.e. role on project)	Approximate % of Total Fee
Pare Corporation	Engineers, Designers, Planners	
Pavao Brothers	Trucking / Equipment Rental	MBE 10 %
W. Walsh	Temporary By-Pass Piping	

See Attached Bid Exclusions on Following Page

BOYLE & FOGARTY CONSTRUCTION CO., INC.
2 Industrial Drive South, Unit 1 • Smithfield, Rhode Island 02917
Telephone (401) 231-0007 • Fax (401) 231-4410
Site Work • Utility Construction

EXCLUSIONS:

- Please note, the quote for item (6) does not carry any National Grid fees.
- Please note, under 'Add Alternate No. 1', EFI (Engineered Fluid, Inc.), will not supply one designated UL/FM (NFPA) fire pump, unless waivers are signed by RIC (Rhode Island College).

THE AMERICAN INSTITUTE OF ARCHITECTS

AIA Document A310

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we

BOYLE & FOGARTY CONSTRUCTION CO., INC.
2 INDUSTRIAL DRIVE SOUTH, UNIT #1 SMITHFIELD, RI 02917
(Here insert full name ,and address or legal title of Contractor)

as Principal, hereinafter called the Principal, and

NORTH AMERICAN SPECIALTY INSURANCE COMPANY
650 ELM STREET MANCHESTER, NH 03101

a corporation duly organized under the laws of the State of **NEW HAMPSHIRE**

as Surety, hereinafter called the Surety, are held and firmly bound unto

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS,ONE CAPITOL HILL PROVIDENCE, RI 02903
(Here insert full name ,and address or legal title of Owner)

as Obligee, hereinafter called the Obligee, in the sum of **Five Percent of Amount Bid ($ 5%)** for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for **Cement Water Main Replacements and Water Booster Pump Stations at RIC Bid #7448088**
(Here insert full name, address and description of project)

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this **20th** day of **January, 2011.**

BOYLE & FOGARTY CONSTRUCTION CO., INC.

(Principal) (Seal)

Nancy A Clavet
(Witness)

(Title) V.P.

NORTH AMERICAN SPECIALTY INSURANCE COMPANY

(Surety) (Seal)

(Witness)

Shelly L. Andrade
(Title)
Shelly L. Andrade, ATTORNEY-IN-FACT

NAS SURETY GROUP

NORTH AMERICAN SPECIALTY INSURANCE COMPANY
WASHINGTON INTERNATIONAL INSURANCE COMPANY

GENERAL POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, THAT North American Specialty Insurance Company, a corporation duly organized and existing under laws of the State of New Hampshire, and having its principal office in the City of Manchester, New Hampshire, and Washington International Insurance Company, a corporation organized and existing under the laws of the State of New Hampshire and having its principal office in the City of Schaumburg, Illinois, each does hereby make, constitute and appoint:

WILLIAM F. HERTEL, JOSEPH A. SERVANT,
JAMES L. MASTORS and SHELLY L. ANDRADE
JOINTLY OR SEVERALLY

Its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its act and deed, bonds or other writings obligatory in the nature of a bond on behalf of each of said Companies, as surety, on contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract or suretyship executed under this authority shall exceed the amount of:

FIFTY MILLION ($50,000,000.00) DOLLARS

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both North American Specialty Insurance Company and Washington International Insurance Company at meetings duly called and held on the 24th of March, 2000:

"RESOLVED, that any two of the Presidents, any Managing Director, any Senior Vice President, any Vice President, any Assistant Vice President, the Secretary or any Assistant Secretary be, and each or any of them hereby is authorized to execute a Power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Company bonds, undertakings and all contracts of surety, and that each or any of them hereby is authorized to attest to the execution of any such Power of Attorney and to attach therein the seal of the Company; and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signatures or facsimile seal shall be binding upon the Company when so affixed and in the future with regard to any bond, undertaking or contract of surety to which it is attached."

NORTH AMERICAN SPECIALTY INSURANCE COMPANY CORPORATE SEAL 1973 NEW HAMPSHIRE

By _____
Steven P. Anderson, President & Chief Executive Officer of Washington International Insurance Company & Senior Vice President of North American Specialty Insurance Company

By _____
David M. Layman, Senior Vice President of Washington International Insurance Company & Vice President of North American Specialty Insurance Company

WASHINGTON INTERNATIONAL INSURANCE COMPANY CORPORATE SEAL NEW HAMPSHIRE

IN WITNESS WHEREOF, North American Specialty Insurance Company and Washington International Insurance Company have caused their official seals to be hereunto affixed, and these presents to be signed by their authorized officers this 15th day of December, 2010.

North American Specialty Insurance Company
Washington International Insurance Company

State of Illinois
County of Cook ss:

On this 15th day of December, 2010, before me, a Notary Public personally appeared Steven P. Anderson, President and CEO of Washington International Insurance Company and Senior Vice President of North American Specialty Insurance Company and David M. Layman, Senior Vice President of Washington International Insurance Company and Vice President of North American Specialty Insurance Company, personally known to me, who being by me duly sworn, acknowledged that they signed the above Power of Attorney as officers of and acknowledged said instrument to be the voluntary act and deed of their respective companies.

"OFFICIAL SEAL"
DONNA D. SKLENS
Notary Public, State of Illinois
My Commission Expires 10/06/2011

Donna D. Sklens
Donna D. Sklens, Notary Public

I, James A. Carpenter, the duly elected Assistant Secretary of North American Specialty Insurance Company and Washington International Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney given by said North American Specialty Insurance Company and Washington International Insurance Company, which is still in full force and effect.

IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Companies this 20th day of January, 2011.

James A. Carpenter

James A. Carpenter, Vice President & Assistant Secretary of Washington International Insurance Company & North American Specialty Insurance Company

Form **W-9**
(Rev. November 2005)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give form to the requester. Do not send to the IRS.

Print or type See Specific Instructions on page 2.

Name (as shown on your income tax return)
Boyle & Fogarty Construction Co., Inc.

Business name, if different from above
Same

Check appropriate box: ☐ Individual/ Sole proprietor ☒ Corporation ☐ Partnership ☐ Other ▶ ☐ Exempt from backup withholding

Address (number, street, and apt. or suite no.)
2 Industrial Drive South, Unit 1

Requester's name and address (optional)

City, state, and ZIP code
Smithfield, RI 02917

List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.

Social security number
			–			–		

or

Employer identification number
0	5	–	0	4	1	2	2	2	0

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
3. I am a U.S. person (including a U.S. resident alien).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. (See the instructions on page 4.)

Sign Here Signature of U.S. person ▶ *P Fogarty* Date ▶ 12/28/10

Purpose of Form

A person who is required to file an information return with the IRS, must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

U.S. person. Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee.

In 3 above, if applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

For federal tax purposes, you are considered a person if you are:

- An individual who is a citizen or resident of the United States,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States, or
- Any estate (other than a foreign estate) or trust. See Regulations sections 301.7701-6(a) and 7(a) for additional information.

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases:

- The U.S. owner of a disregarded entity and not the entity,

BOYLE & FOGARTY CONSTRUCTION CO., INC.
2 Industrial Drive South, Unit 1 • Smithfield, Rhode Island 02917
Telephone (401) 231-0007 • Fax (401) 231-4410
Site Work • Utility Construction

January 20, 2011

State of Rhode Island
Division of Purchasing
One Capitol Hill
Providence, RI 02908

RE: Qualification Statement – Cement Water Main Replacements
And Water Booster Pump Stations At Rhode Island College
RFP #7448088

Please be advised that my firm has been in the sewer, water and drainage construction business since 1978. We have completed numerous projects for various municipalities, many of which have been under the state revolving fund, including MBE/WBE requirements.

1. City of Newport - Ocean Avenue
   Mr. Ken Mason #401-845-5614
   *Phase I – Install 8100' of 12" DI Water Main – 1.3 Million
   *Phase II – Install 8800' of 8" DI Water Main – 1 Million
   *Phase III – Install 13000' of 12" DI Water Main – 1.7 Million

2. Greenville Water District – Greenville, RI – Annual Contract
   Mr. David Powers #401-231-1433
   *Various Water Main & Water Repair Projects for the Past 29 Years
   *Installation of 6000' of 12" Main – Colwell Road

3. James Geremia & Associates
   Mr. Richard Hencler #401-454-7000, Engineer for Various Projects Such As:
   *Town of North Smithfield – Water Main Installation
   Installation of Water Main Over Bridge on RI DOT Rte.146
   *Town of New Shoreham – Approx. 4000' of Main Installation

(Cont. P2)

4. East Smithfield Water District – Smithfield, RI – Annual Contract
   Mr. Raymond DiSanto #401-231-0510
   Mr. Tim Thies, Pare Engineering #401-334-4100
   *Various Water Main & Water Repair Projects
   *Installation of 2000' of 16" Main & "Hot Box"

5. Providence Water Supply Board – 3 Yr. Blanket Contract 2006-2009, 2010-2012
   Mr. Norman Ripstein #401-521-6300
   *Water Main & By Pass Installation

6. Providence Water Supply Board – Jewelry District
   Sept. 2010 to Dec. 31, 2010 - $800,000
   Mr. Norman Ripstein #401-521-6300
   *Replace Approx. 4400" of 8" Water Main Using By Pass Piping

7. Town of Cumberland – Annual Contract
   Mr. Chris Champi #401-692-9300
   *Water Main Installation & Emergency Repair Contract

8. Bryant University – Smithfield, RI – 2000
   *Install Approx. 5000' of 16" DI Water Main

9. Town of North Smithfield – Graham Drive - $600,000
   Mr. Russell Carpenter #401-767-4006
   *Install Water Main & EFI Water Booster Station

10. Town of Burrillville – 2009 – 3.9 Million
    Mr. William Skerpan, Beta Engineering #401-333-2382
    *Sewer Main & Pump Station Installation

Qualifications of Onsite Construction Supervisor

- Mr. Joseph Velardo – Superintendent
  35 Years Sewer, Water & Site Work
  (Former Gen. Superintendent @ Fleet Construction)

- Mr Russell J. Boyle
  Sewer & Water Main Installation Since 1978
  Also Acts as Job Superintendent

(Cont. P3)

Equipment:

- (4) Excavators
- (1) Rubber Tire Excavator
- (4) Rubber Tire Backhoes
- (3) Tri-Axle Dump Trucks
- (5) Stake Body Trucks
- (5) Pick Up Trucks
- (2) Hydraulic Hammers

All Employees – 10 Hour OSHA Training

Bank: Bank of America, Mr.Mark Cousineau #888-852-5000 X1242

Bonding Agent: Mr. William Hertel, Mastors & Servant #401-885-5700

Subsidiary B& F Water & Sewer Services, Inc. (1997)
John P. Fogarty, President
Russell J. Boyle, Vice President

- Water Main Testing & Tapping – Pressure Test & Chlorinate, Tapping Sleeves, Poweram Trenchless Installation, Saw Cutting, Sewer Testing & Core Drilling
- Insertion Valves, Line Stops, Pipe Fusion
- Temporary Water By Pass Installation

Number of Employees: 3 to 5

Founded Boyle & Fogarty Construction Co., Inc. (1978)
Russell J. Boyle, President & Secretary
1978 Graduate of Bryant College, Smithfield, RI

John P. Fogarty, Vice President & Treasurer
1978 Graduate of Bryant College, Smithfield, RI
1985 Graduate, New England School of Law, Boston, MA
Admitted to the RI Bar Association (1986)

Number of Employees: 22 to 25

Members of Local 57, Local 271 & Local 251

ENGINEERS
SCIENTISTS
PLANNERS

www.parecorp.com

PARE CORPORATION

January 20, 2011

Mr. John Fogarty, President
Boyle & Fogarty Construction Co., Inc.
2 Industrial Dr., South
Unit #1
Smithfield, RI 02917

Re: **Request for Proposals**
ARRA Cement Water Main Replacements and Water Booster Pump Station
Rhode Island College
(PARE Proposal No. EP360.10)

Dear Mr. Fogarty:

Pare Corporation (PARE) is pleased to submit this qualification and fee package to provide Professional Engineering Services associated with the Water Main Replacement and Booster Pump Station project at Rhode Island College (RIC). **Without question, PARE is one of the most experienced engineering firms in Rhode Island in the area of water system engineering.** We have 40 years of experience providing innovative and cost-effective engineering services to water suppliers throughout New England.

Some of our recent projects at RIC include an Infrastructure Study, Campus Master Planning (sub to Saratoga Associates), rehabilitation of the Recreation Center (sub to Design Partnership), and the recently-awarded Art Center rehabilitation (sub to Design Partnership). PARE's recent project experience at RIC gives us an unparalleled understanding of RIC's water distribution system and their goals for this project. It should be noted that many of the requirements outlined in RIC's project RFP are predicated on the findings of PARE's initial Infrastructure Study. PARE will be able to build on our existing knowledge of the campus, in addition to our extensive experience in water distribution system engineering, pump station design, hydraulic modeling, and the requirements of the American Recovery and Re-investment Act (ARRA), to help to make this project a success.

Enclosed for inclusion in your bid package are the following documents:

1. PARE's Company Profile;
2. Resume's for Professional Staff that will be assigned to this Project;
3. Sample project sheets that demonstrate some of our experience on similar projects; and
4. PARE's Design Approach, Scope of Services, and Schedule.

If you have any questions or comments regarding the enclosed information, please do not hesitate to contact me at your earliest convenience.

Very truly yours,

George G. Palmisciano, P.E.
Senior Vice President

GGP/pt

Attachments

8 BLACKSTONE VALLEY PLACE, LINCOLN, RI 02865 T401-334-4100 F401-334-4108
10 LINCOLN ROAD, SUITE 103, FOXBORO, MA 02035 T508-543-1755 F508-543-1881

PARE CORPORATION ▪ COMPANY PROFILE

Celebrating 40 years of service in New England

BACKGROUND

Established in 1970, Pare Corporation (PARE) is a multi-disciplinary firm comprised of planners, scientists, and engineers specializing in the areas of civil, environmental, structural, geotechnical, waterfront/marine, transportation, and municipal projects. The firm serves all of New England and the Northeastern United States from offices in Lincoln, RI, and Foxboro, MA. With four decades of cost-conscious planning and innovative design solutions—from project conception through post-construction services—we have established long-term relationships with a wide range of public- and private-sector clients throughout the region. Our commitment to practical, client-driven design has resulted in repeat business from more than 90% of our clients.

STAFFING CAPABILITIES

PARE employs approximately 60 professional, technical, and support personnel. 60% of the engineering staff are registered professionals, and 15 individuals have received graduate degrees. Division Managers possess at least 20 years of experience within their fields of specialization, and Project Managers have at least 10 years of applicable experience. In-house planners, wetland specialists, and environmental scientists support the firm's planning and design efforts, specializing in the coordination and monitoring of all permitting requirements. Through in-house training and the firm's policies for continuing education, PARE personnel have remained current with emerging engineering technologies.

SERVICE AREAS

- Water Supply/Waterworks Engineering
- Wastewater/Sanitary Engineering
- Structural Engineering
- Geotechnical Engineering
- Site Planning and Land Development
- Roadway and Bridge Engineering
- Traffic and Transportation Engineering
- Dam Engineering
- Wetlands Delineation/Mitigation
- Environmental Studies and Permitting
- Hazardous Waste Remediation
- Stormwater Management and Drainage
- Parks and Recreational Development
- Marine/Waterfront Engineering
- Condition Surveys/Facilities Engineering
- Pre- and Post-Construction Monitoring
- Construction-Phase Services

CLIENTS

- Colleges and Universities
- Water Suppliers and Authorities
- State and Municipal Agencies
- Medical and Healthcare Facilities
- Developers and Contractors
- Manufacturing Clients
- Power and Utility Companies
- Port Operators and Authorities
- Financial Institutions
- US Department of Transportation
- US Department of Defense

OFFICES

- 8 Blackstone Valley Place
  Lincoln, RI 02865
  (401) 334-4100 FAX (401) 334-4108

- 10 Lincoln Rd., Suite 103
  Foxboro, MA 02035
  (508) 543-1755 FAX (508) 543-1881

George G. Palmisciano, P.E.
Principal-in-Charge

PARE CORPORATION

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer – Rhode Island, Massachusetts, Connecticut

MA Department of Environmental Protection Licensed Soil Evaluator

Individual Sewage Disposal Systems, Class III Designer, Rhode Island

OSHA Hazardous Waste Operations 40-Hour Health and Safety Training

OSHA Construction Safety 10-Hour Training

PROFESSIONAL AFFILIATIONS

Rhode Island Society of Environmental Professionals, Founder & Honorary Director

American Water Works Association

New England Water Works Association

Water Environment Federation

New England Water Environment Association

Rhode Island Consulting Engineers, Member of Rhode Island Resource Recovery Corporation Liaison Committee

EDUCATION

University of Connecticut: M.S., Civil & Environmental Engineering, 1981

University of Rhode Island: B.S., Civil & Environmental Engineering, 1974

RELEVANT EXPERIENCE

Mr. Palmisciano has been responsible for numerous water supply, storage and transmission improvement projects including the development of water supply management and capital improvement plans, computerized hydraulic modeling, design and construction of water transmission mains, well testing programs, the design of water storage facilities and water system operations consultation. Representative projects include:

- **Rhode Island College Infrastructure Master Plan:** Principal-in-Charge of a comprehensive review of all on-campus utilities at RIC's 180-acre campus including utility systems for electric, steam & condensate, water, sanitary sewer, natural gas, drainage systems, and communications/IT. Recommended improvements will be outlined, compiled, ranked, and then prioritized over a 5-year period. Providence, RI.

- **United Water Rhode Island Underground Booster Pump Station – Design Build:** Principal-in-Charge of the design, permitting, and construction related services associated with the construction of a new underground booster pump station. South Kingstown, RI.

- **South Kingstown/United Water RI Interconnection:** Principal-in-Charge of design, permitting, bidding, and construction-related services for an emergency water interconnection between the existing UWRI Wakefield water system and the South Kingstown South Shore water district. South Kingstown, RI.

- **Town of North Kingstown Well No. 11 Pump Station:** Principal-in-Charge of the design, permitting, bidding, and construction-related services associated with the construction of a new well pump station. North Kingstown, RI.

- **Providence Water Supply Board – Dean Estates & Garden Hills Pumping Stations:** Principal-in-Charge of the design of improvements and modifications to two potable water pumping stations. Cranston, RI.

- **Main Street Water Main Replacement:** Principal-in-Charge of design, permitting, bidding, and construction-related services for 5,300 linear feet of 12-inch water main. Upton, MA.

- **State Street South Office Park:** Principal-in-Charge of the design of upgrades to the utility infrastructure at this corporate office park. Investigated evaluation of the entire utility network for the site including water, sanitary sewer, storm drainage, site lighting, and telecommunications. Provided full-time construction observation. Quincy, MA.

- **Woonsocket Water Storage Tanks:** Principal-in-Charge of this distribution storage capacity augmentation project which included five tanks: a new 750,000-gallon steel elevated tank in the Rhodes Avenue high-service district, new 3-MG and 1.5-MG pre-stressed concrete reservoirs and a 750,000-gallon elevated steel tank in an existing "tank farm," and a 1-MG pre-stressed concrete ground storage tank at Cobble Hill. Woonsocket, RI.

- **Pascoag Utility District Well Activation:** Principal-in-Charge of engineering services for the activation of Well 3A, including design of new pumping station, design of a new 35' x 18' concrete block wellhouse

structure, permitting, construction observation, and an O&M Manual. Burrillville, RI.

- **Carr Pond Satellite Wells:** Principal-in-Charge of the design of two new precast well stations with a combined capacity of 1.0 MGD. North Kingstown, RI.

- **Town of Westerly Water System Hydraulic Model:** Principal-in-Charge of development of a hydraulic model of the Town's water distribution system which includes seven pumping stations with eleven wells, six water storage facilities, and 190 miles of water mains. Westerly, RI.

- **Pastore Complex Hydraulic Model and Elevated Tank Rehabilitation:** Principal-in-Charge for the evaluation of the existing water system and production of a water system map and hydraulic model of this state-owned 1,000-acre facility with ten miles of pipeline, three booster pumps, and one elevated storage tank which serve various state departments located in over 100 buildings. Cranston, RI.

- **Greenville Water District Hydraulic Model and Water System Consulting:** Principal-in-Charge for the development of a Cybernet-based computerized hydraulic model of the District's water system, the preparation of a long-range planning study for the system, numerous hydraulic evaluations of proposed land development projects within the District, and construction observation services for numerous watermain installations and facility upgrades. Smithfield, RI.

- **Capital Improvement Program (CIP 4 and 6), Kent County Water Authority:** Project Manager for the design of approximately 30,000 linear feet of 12- and 16-inch water transmission main. These projects included 3 bridge attachments and a subaqueous river crossing and all associated permitting activities. Kent County, RI.

- **Rhodes Avenue Potable Water Booster Pump Station:** Project Manager responsible for the evaluation and design of the upgrade of the Pump Station for the City of Woonsocket Water System. The preferred rehabilitation option was brought through full design including electrical, mechanical, and architectural improvements. Woonsocket, RI.

- **East Smithfield Water System:** Principal-in-Charge of the development of Cybernet-based hydraulic model. This system serves a population of over 20,000 people. The model included full system evaluations and recommendation for capital improvements for optimized system operations. Smithfield, RI.

- **Richmond Hydraulic Model:** Principal-in-Charge of the development of a computerized hydraulic model for the Town's water system. The model was developed utilizing Cybernet modeling software. Richmond, RI.

- **Providence Water Supply Board Water Treatment Plant:** Principal-in-Charge of on-site structural inspection for facilities needs assessment. Structures included influent control chamber, influent aerator, 150 MG coagulation basins, filter wing, underground 40,000-gallon backwash tank, elevated 40,000-gallon service water tank, 80 MGD (100% Backup) raw water pump station, and associated facilities. Scituate, RI.

Armando J. Ricci, P.E.
Managing Engineer

PARE CORPORATION

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer – Rhode Island

Individual Sewage Disposal Systems, Class III Designer, Rhode Island

Conventional Septic System Inspector – Rhode Island

OSHA Hazardous Waste Operations 40-Hour Health and Safety Training

OSHA Construction Safety 10-Hour Training

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Providence Engineering Society

EDUCATION

Worcester Polytechnic Institute:
M.S., Environmental Engineering, 2004

Brown University:
B.S., Civil Engineering, 1994

RELEVANT EXPERIENCE

Mr. Ricci has participated in the evaluation, design, cost estimating, construction, project management and observation of a variety of improvements for potable water, wastewater, stormwater collection/distribution, and solid waste management. In addition to more than 14 years of engineering experience, he previously worked for a construction firm for eight years, allowing him to acquire a unique appreciation of the development of projects from the initial design to the final outcome of construction. Representative project experience includes:

- **Kent County Water Authority Clinton Avenue Booster Pumping Facility Evaluation:** Project Engineer for the evaluation of the existing 12 MGD water supply pumping station, including assessing pump station capacity for future 20 year system requirements, hydraulics of existing station, pump tests on three 4 MGD vertical turbine pumps, drainage options to alleviate station ground water flooding, automation of pump station controls, management of architectural, electrical and structural consultants, and preparation of construction cost estimates. Scituate, RI.

- **Former Ladd Center Water System Evaluation:** Project Engineer of a complete evaluation of all water system components and an assessment of the capabilities of the aquifer system serving the 450-acre facility. The final elements of the project included the development of various water system management plans to ensure continued regulatory compliance: Wellhead Protection Plan, Watershed Protection Plan, Corrosion Control Study, and Surface Water Treatment Rule Compliance Plan. Exeter, RI.

- **Mashantucket Pequot Tribal Nation Hydraulic Model:** Project Manager for computerized hydraulic model of private water system to determine its ability to service a planned housing development. Mashantucket, CT.

- **Prudence Island Water System Master Plan and Improvements:** Senior Project Engineer for a comprehensive evaluation and Master Plan of this island water system. Provided construction administration for new water tank designed by PARE. Portsmouth, RI.

- **Canonchet Cliffs Assisted Living Community:** Project Manager for the design of a fire booster pump station to provide fire protection to seven buildings throughout the Canonchet Cliffs Assisted Living Community. The design of the new pump station included the design off on-site fire cisterns, a new pump station building and wet well, and the incorporation of an existing vertical turbine fire pump and engine set. Hopkinton, RI.

- **Town of Westerly Water System Hydraulic Model:** Project Engineer responsible for producing a hydraulic model of the Town's water distribution system. This project consisted of modeling seven pumping stations with eleven wells, six water storage facilities, and 190 miles of water main by creating over 1,700 pipelines with approximately 1,400 junction nodes. Westerly, RI.

- **Westerly Clean Water Infrastructure Plan:** Project Engineer for development of a Clean Water Infrastructure Plan (CWIP), encompassing all water system components and a cost and schedule breakdown for improvements and/or replacements. The CWIP was developed to span a 20-year period, broken into 5-year intervals. Westerly, RI.

- **North Kingstown - New Well Pump Station:** Project Manager for the design of a new pump station to enable activation of a recently-installed source water well for the Town's water system. North Kingstown, RI.

- **Town of North Kingstown Hydraulic Model:** Engineer for the creation of a hydraulic model of the Town's Water Distribution System. Specific tasks included the insertion of nodes and pipelines, and development of hydraulic data for the average day, maximum day, peak hour, and maximum summer day anticipated demands. North Kingstown, RI.

- **State of Rhode Island Pastore Complex Hydraulic Model:** Engineer for the evaluation of the existing water system and production of a water system map and hydraulic model of this 1,000-acre facility with ten miles of pipeline, three booster pumps and one elevated storage tank which serve various state departments located in over 100 buildings. Cranston, RI.

- **Greenville Water District Hydraulic Model:** Engineer for the development of a computerized hydraulic model of the District's water system. This system is supplied by one interconnection to the Providence Water Supply Board and consists of three booster pump stations and a storage tank. Smithfield, RI.

- **East Smithfield Water System Hydraulic Model:** Engineer responsible for producing a hydraulic model for the water distribution system which included developing nodes and pipelines, hydraulic data, and research of historical hydraulic patterns. Evaluated the effects which future residential and industrial developments would have on the system including possible connections to other sources of supply. Smithfield, RI.

- **Utility Extensions and Reconstruction of Stilson Road:** Construction Resident Observer for various construction activities, as well as review of submittals and progress payments, associated with major improvements to approximately 2,200 feet of roadway which included the extension of 12" ductile iron water main complete with fire hydrants, sprinkler and service connections, precast concrete catch basins, manholes and galleys, and the construction of a retention pond. Richmond, RI.

- **Kent County Water Authority, Hope Road Booster Pump Station:** Project Engineer responsible for the design and contract documents of a new water booster pumping station to replace an existing antiquated station, which serves potable water to 18 residences. Cranston, RI.

- **Kent County Water Authority Capital Improvement Plans 4 and 6:** Engineer responsible for the design, preparation of construction documents, and construction administration for the replacement and installation of six miles of 12- and 16-inch water main and appurtenances. Coventry, East Greenwich, North Kingstown, and West Warwick, RI.

- **Town of Smithfield Hydraulic Model:** Engineer for the development of a Cybernet-based hydraulic model to evaluate the Town's water system which is supplied by one interconnection from the Providence Water Supply Board and consists of three booster pumps, three storage tanks and distribution piping to serve 1,100 residential, commercial and industrial accounts which consume over 270 million gallons per year. Smithfield, RI.

Brendan F. Ennis, P.E.
Senior Project Engineer

PARE CORPORATION

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer – Rhode Island

OSHA Hazardous Waste Operations 40-Hour Health and Safety Training

OSHA Hazardous Waste Operations 8-Hour Refresher Training

OSHA Construction Safety 10-Hour Training

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

New England Water Environment Association

Providence Engineering Society

EDUCATION

Worcester Polytechnic Institute:
M.S. Civil Engineering, 2006

University of Rhode Island:
B.S., Civil Engineering, 1995

RELEVANT EXPERIENCE

Mr. Ennis has extensive experience with municipal water systems, including the preparation of water supply system management plans and their updates, clean water infrastructure replacement plans and updates, and master plans. He has also been responsible for the design of stormwater, wastewater, and clean water pipe networks which include development of all phases of plans and specifications, hydraulic analyses and reports, estimating, subcontractor agreements, scheduling, and project research. Representative projects include:

- **Rhode Island College Infrastructure Master Plan:** Project Manager for a comprehensive review of all on-campus utilities at RIC's 180-acre campus including utility systems for electric, steam & condensate, water, sanitary sewer, natural gas, drainage systems, and communications/IT, as well as transportation infrastructure such roadways, parking lots and walkways. Recommended improvements will be outlined, compiled, ranked, and then prioritized over a 5-year period. Providence, RI.

- **Providence Water Supply Board – Dean Estates & Garden Hills Pumping Stations:** Project Engineer for the design of improvements and modifications to two potable water pumping stations. Cranston, RI.

- **United Water Rhode Island Underground Booster Pump Station – Design Build:** Project Manager for the design, permitting, and construction related services associated with the construction of a new underground booster pump station. South Kingstown, RI.

- **South Kingstown/United Water RI Interconnection:** Senior Project Engineer responsible for design, permitting, bidding, and construction-related services for an emergency water interconnection between the existing UWRI Wakefield water system and the South Kingstown South Shore water district. PARE designed a new 12", 10,000-lf ductile iron main located within the right-of-way of Commodore Perry Memorial Highway (U.S. Route 1). South Kingstown, RI.

- **Town of North Kingstown Well No. 11 Pump Station:** Senior Project Engineer for the design, permitting, bidding, and construction-related services associated with the construction of a new well pump station. North Kingstown, RI.

- **Kent County Water Authority – 1.5 MG Water Storage Tank:** Project Manage for the design, permitting, and bidding services associated with the construction of a new 1.5 MG water storage tank. Coventry, RI

- **Water Storage Tank Design:** Project Manager involved in the design and construction of five new water storage facilities: a 3-million-gallon ground storage reservoir of prestressed concrete, two 750,000-gallon elevated steel tanks with a fluted-column design, a 1,500,000-gallon ground storage reservoir, and a 1-million-gallon ground storage tank, to augment the distribution storage capacity of a municipal water system. Woonsocket, RI.

- **Town of Smithfield Water Supply System Management Plan 5-Year Update:** Project Manager for the five-year update of the Town's WSSMP, including the emergency management component and source water assessment update. Smithfield, RI.

- **Woonsocket Water Supply System Management Plan Update 5-Year Update:** Project Manager for the update of the Water Supply System Management Plan, including the emergency management component and source water assessment update. Woonsocket, RI.

- **Providence Water Supply Board Water Supply System Management Plan 5-Year Update:** Project Manager for the update of the Water Supply System Management Plan, including the emergency management component and source water assessment update. Providence, RI.

- **East Smithfield Water District Water - Water Supply System Management Plan 5-Year Update:** Project Manager for the update of the Water Supply System Management Plan, including the emergency management component and source water assessment update. Smithfield, RI.

- **Pawtucket Water Supply Board Water Supply System Management Plan 5-Year Update:** Project Manager for the update of the Water Supply System Management Plan, including the emergency management component and source water assessment update. Pawtucket, RI.

- **Burlingame State Park Water Distribution Project – Rhode Island Department of Environmental Management:** Project Engineer for design of replacement facilities for most of the water system serving 700 acres of this state-owned camping area, including a new water supply well, pump stations, and a new storage tank. Charlestown, RI.

- **Cove Bridge Waterline Design:** Project Engineer for design of 4,800 linear feet of 10-inch ductile iron water line to replace an existing 6-inch and 8-inch waterline along two state-owned roadways, including 360 feet of a 10-inch exposed waterline attachment to a bridge, which will replace an existing subaqueous pipeline. Portsmouth, RI.

- **State Street South Office Park:** Senior Project Engineer for upgrades to the utility infrastructure at this corporate office park. Investigated evaluation of the entire utility network for the site including water, sanitary sewer, storm drainage, site lighting, and telecommunications. Made recommendations for and provided design of improvements. Quincy, MA.

- **Kent County Water Authority – Water Storage Tank Evaluation and Feasibility:** Project Engineer for evaluation of the feasibility of a new water storage tank in the 1.5 - 2.0 MG range. Project included determination of tank style, evaluation of tank site locations, constructability, opinions of probable costs, and recommendations. Coventry. RI.

- **Greenville Terrace Subdivision - Greenville Water District:** Responsible for construction observation of watermain installation within the Greenville Terrace Subdivision. Smithfield, RI.

- **Reactivation of Pump Station:** Project Engineer for design of a replacement pumping system and associated process equipment as part of the upgrade to an existing, inactive pump station, which is presently owned by the Kent County Water Authority (KCWA), to serve the needs of the Amgen industrial development. West Warwick, RI.

Timothy P. Thies, P.E.
Senior Project Engineer

PARE CORPORATION

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer – Rhode Island, Massachusetts

OSHA Construction Safety 10-Hour Training

OSHA Hazardous Waste Operations and Emergency Response 40-Hour Training

PROFESSIONAL AFFILIATIONS

Providence Engineering Society

American Public Works Association

Massachusetts Water Works Association

EDUCATION

Worcester Polytechnic Institute:
M.S., Environmental Engineering, 2002
B.S., Civil Engineering, 2000

RELEVANT EXPERIENCE

Mr. Thies has worked on a wide variety of environmentally related projects, ranging from hydraulic studies and the design of improvements for potable water, wastewater, drainage and solid waste facilities to field investigations and sampling programs for hazardous waste studies and remediation. Representative projects include:

- **East Providence Cleaning and Lining:** Project Manager responsible for the direct oversight of PARE's construction administration for Phase I of the City's water main cleaning and lining project. The project included full-time construction observation, review of shop drawings, contractor RFIs, contractor quantities and payment requests, and the collection of as-built information. This project was partially funded through the American Recovery and Reinvestment Act of 2009 (ARRA). PARE assisted the City with their ARRA reporting requirements. East Providence, RI

- **Bristol County Water Authority Hydraulic Model Development:** Project Manager for the development of a hydraulic model of a water system serving approximately 16,000 customers in three towns. Project included identifying system deficiencies and recommending capital improvements, as well as developing a full-system operations map. Bristol, Warren & Barrington, RI.

- **Canonchet Cliffs Assisted Living Community:** Engineer responsible for the design of a fire booster pump station to provide fire protection to seven buildings throughout the complex. Included the design off on-site fire cisterns, a new pump station building and wet well, and the incorporation of an existing vertical turbine fire pump and engine set. Hopkinton, RI.

- **State Street South Office Park:** Project Engineer for upgrades to the utility infrastructure at this corporate office park. Investigated evaluation of the entire utility network for the site including water, sanitary sewer, storm drainage, site lighting, and telecommunications. Made recommendations for and provided design of improvements. Quincy, MA.

- **Groton Schools Hydraulic Evaluation:** Engineer responsible for the evaluation of the existing water supply and distribution system in Groton, CT to provide water to three new schools. The evaluation included the development of a hydraulic model for each school, as well as performing hydrant flow tests and providing recommendations for major system improvements to provide adequate fire flow to each facility. Groton, CT.

- **Pastore Complex Hydraulic Model:** Engineer responsible for updating the existing RI Department of Behavioral Healthcare, Developmental Disabilities and Hospitals hydraulic model, including the incorporation of a new pump station as well as the evaluation of several new facilities within the hospital complex. Cranston, RI.

- **Burlingame State Park Water Distribution Project:** Engineer responsible for several tasks related to the evaluation and design of water system improvements. Tasks included the evaluation of the existing water distribution system using WaterCAD v.6.5, the design of a new VFD pump station, the replacement of 9,000 feet of asbestos cement water line, the design of 18,000 feet of new PVC water line, and the design of several new well control buildings. Charlestown, RI.

- **South Kingstown/United Water RI Interconnection:** Engineer responsible for hydraulic evaluation of the South Kingstown/United Water Interconnection along Post Road. The evaluation was performed by constructing a computerized hydraulic model of the South Kingstown and United Water RI water distribution system using WaterCAD v.6.5. South Kingstown, RI.

- **Mashantucket Pequot Tribal Nation Phase 7A Housing Development:** Engineer responsible for the evaluation of the existing water distribution system and gravity sewer collection system. Assisted in the design of approximately 13,000 LF of new water mains and gravity sewer, as well as the design of a new water booster pump station. Ledyard, CT.

- **Town of North Kingstown Hydraulic Model:** Project Engineer for 2008 update of the Town's hydraulic model. Engineer for the maintenance of the hydraulic model including the insertion of nodes and pipelines, and development of hydraulic data for the average day, maximum day, peak hour, and maximum summer day anticipated demands, and simulating capacity of system to serve proposed subdivisions and developments within the Town. North Kingstown, RI.

- **Greenville Water District Hydraulic Model:** Engineer for the maintenance of a computerized hydraulic model of the District's water system. This system is supplied by one interconnection to the Providence Water Supply Board and consists of three booster pump stations and a storage tank. Smithfield, RI.

- **Town of Smithfield Hydraulic Model:** Engineer for the maintenance of a WaterCAD hydraulic model to evaluate the Town's water system which is supplied by one interconnection from the Providence Water Supply Board and consists of three booster pumps, three storage tanks and distribution piping to serve 1,100 residential, commercial and industrial accounts which consume over 270 million gallons per year. Smithfield, RI.

- **Southborough Water System Master Plan:** Project Engineer responsible for the preparation of System Master Plan. The plan includes an evaluation and identification of system deficiencies in supply, piping, and storage, as well as an evaluation of the existing operational controls and flushing program. Southborough, MA.

- **Town-Wide SCADA:** Project Engineer for design of a new Supervisory Control and Data Acquisition system for the Town's water system. The project included a conversion to radio frequency for data transmittal, connection of the data to a central location (DPW garage) and the inclusion of remote transmitting station at the three water tanks, the two pumping station and the four pressure reducing valves connecting the high and low service areas. Southborough, MA.

- **Hydraulic Model Development:** Project Engineer for the calibration and development of a hydraulic model for the Town of Southborough's water system. The project included meetings with the Town to accurately represent the system, meeting with the Town Planner to accurately depict future conditions and a review of water system pumping and use records. Hydrant flow tests were also performed throughout the system to calibrate the information in the model. Southborough, MA.

Brandon M. Blanchard, P.E.
Project Engineer

PARE CORPORATION

REGISTRATIONS AND CERTIFICATIONS

Professional Engineer: Rhode Island

Onsite Wastewater Treatment Systems, Class III Designer, Rhode Island

MADEP Title V System Inspector

OSHA Hazardous Waste Operations 40-Hour Health and Safety Training

OSHA Construction Safety 10-Hour Training

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

US Green Building Council – Rhode Island Chapter

EDUCATION

Worcester Polytechnic Institute, Worcester, MA - M.S., Environmental Engineering, 2010

Lehigh University, Bethlehem, PA - B.S., Civil Engineering, 2003

RELEVANT EXPERIENCE

Mr. Blanchard has an impressive background in various aspects of civil and environmental engineering. He is especially proficient in the areas of solid waste engineering and on-site wastewater treatment and disposal. Mr. Blanchard's additional experience includes development of plans and specifications, surveying, soil and groundwater sampling and hydrant flow testing. Construction observation experience includes observation of installation of utility structures, ISDS components and other site development work. Mr. Blanchard also has a working knowledge of AutoCAD, WaterCAD, SewerCAD, MODFLOW, and other technical computer programs. Relevant engineering experience includes:

- **Lakeside Commerce Center Water Supply Evaluation**: Staff Engineer for an evaluation performed for the Rhode Island Resource Recovery Corporation to estimate the available fire flow water supply at the Lakeside Commerce Center. The evaluation included pressure monitoring, hydrant flow testing, hydraulic modeling in WaterCAD, and preparation of a report of our findings. Johnston, RI.

- **Inskip Motors Site Redevelopment:** Staff Engineer for permitting and design of improvements to existing water and wastewater services for the redevelopment of two Inskip facilities in Warwick and West Warwick, Rhode Island. Tasks responsible for include preparation of water and wastewater demand calculations, hydraulic modeling using WaterCAD, and permitting with the Kent County Water Authority. Warwick and West Warwick, RI.

- **Main Street Water Main Replacement:** Staff Engineer for the design of approximately one mile of new 12" ductile iron water main to replace an existing water main in Main Street. Upton, MA.

- **Cumberland Hydraulic Model Development:** Staff Engineer performing several hydrant fire flow and "C" value tests and continuous pressure monitoring to assist in development and calibration of a computerized hydraulic model for the Cumberland Water Department. Cumberland, RI.

- **Pressure Reducing Valve Upgrade:** Staff Engineer for the design of updated pressure reducing valves connecting the high and low service areas in the Town of Southborough. The original valves did not function properly due to the slight pressure differential. The new valves were designed to include overrides from the SCADA system to allow for transfer of water during peak demand periods despite the existing differential. An analysis of tank charts assisted in the development of operational protocol. Southborough, MA.

- **Mishnock Water Treatment Plant Site Design:** Staff Engineer for the design of the civil site drawings for a 3 mgd water treatment plant for the Kent County Water Authority. Wetland delineation was performed for the site as well as permitting through RIDEM, RIDOH and the Coventry Planning Board. Unique site design features included the presence of a Rare and Endangered species, high groundwater, an infiltration lagoon and a tight-tank for building wastewater. Coventry, RI.

- **Peach Blossom Lane Sewer Extension:** Staff Engineer for the design of a roughly 400-foot sewer extension to serve three existing homes on Peach Blossom Lane. Project included preparation of design drawings and

calculations, coordination and oversight of borings, and construction phase services. Smithfield, RI.

- **Boy Scouts of America, Narragansett Council – Yawgoog Scout Reservation Water Supply System Upgrades:** Project Engineer for improvements to the water treatment plant and distribution system serving the 1,800-acre Yawgoog Scout Reservation. Hopkinton, RI.

- **Credit Union Central Falls:** Staff Engineer for the development of a roughly 6-acre parcel into a corporate headquarters and branch bank for the Credit Union. The project included site design, development of construction documents, permitting with State and Local regulatory agencies, and construction phase services. Smithfield, RI.

- **Westerly Tank Investigations and Evaluations:** Staff Engineer for analysis of soils contaminated with lead and PAHs associated with a water storage tank. Site remediation aspect included soil sampling and analysis, development of remedial action strategies, RIDEM permitting, public notification, and attendance at meetings with impacted parties. Westerly, RI

- **Woonsocket Water Supply System Upgrades and Site Remediation:** Staff Engineer for analysis of lead contaminated soils at four water storage tank sites in conjunction with the design and construction of replacement tanks. Site remediation aspect included sampling and analysis of soil, development of remedial action strategies, RIDEM permitting, public notification, and construction administration to bring each site into compliance with the RIDEM Remediation Regulations. Woonsocket, RI.

- **Wyatt Detention Center:** Staff Engineer for the sampling and analysis of approximately 10,000 cubic yards of urban fill material associated with the design and construction of a building expansion and new parking facilities for the existing prison facility. Central Falls, RI.

- **East Providence Wastewater Improvements:** Project Engineer for the design of upgrades to the existing gravity sewer collection system at several locations in the Riverside area of East Providence. This project will also include the design of sewer force mains from an existing pump station and two proposed pump stations. East Providence, RI.

- **Rhode Island Resource Recovery Corporation (RIRRC) Cedar Swamp Brook I:** Staff Engineer for improvements to a 1,200 lineal-foot section of Cedar Swamp Brook near the Phase IV Landfill cell. The project included improvements to grading and drainage structures in and along the channel and establishment of plantings within the riparian zone. Johnston, RI.

- **Phase I & II Environmental Site Assessments – 362 Plains Road:** Project Engineer performing a Phase I ESA and limited Phase II ESA for the University of Rhode Island. The site was a residential property that URI acquired following the results of this ESA. South Kingstown, RI.

- **RIDOT - Pocasset Bridge Replacement:** Project Engineer for the investigation, characterization, dewatering, and disposal of contaminated sediment in the Pocasset River beneath Bridge No. 23. Approximately 400 tons of sediment is slated for excavation and disposal by this project. Cranston, RI.

Peter D. DiLorenzo
Engineer

PARE CORPORATION

REGISTRATIONS AND CERTIFICATIONS

OSHA Hazardous Waste Operations 40-Hour Health and Safety Training

OSHA Construction Safety 10-Hour Training

OSHA Hazardous Waste Operations 8-Hour Refresher Training

EDUCATION

University of Rhode Island - B.S., Civil Engineering, 2007

RELEVANT EXPERIENCE

Mr. DiLorenzo has experience on a wide range of wastewater projects for municipal and private clients including development of plans and specifications, surveying, soil and groundwater sampling hydrant flow testing, and erosion and sedimentation control inspections. Construction observation experience includes observation of installation of utility structures, ISDS components, installation of erosion and sedimentation control products, and other site development work. Mr. DiLorenzo also has a working knowledge of AutoCAD, WaterCAD, SewerCAD, StormCAD, and other technical computer programs. Relevant engineering experience includes:

- **Central Avenue Booster Pump Station Relocation:** Staff Engineer for the design of a new water pump station to replace an existing pump station located to the north of the Central Landfill. Project included creating a small-scale hydraulic model of the Town of Johnston's water system, performing hydrant flow tests to calibrate the model, and design of the new pump station based upon the results of the hydrant flow tests and model. Johnston, RI

- **Smithfield Water Supply Board Hydraulic Model and Master Plan Update:** Staff Engineer for an update to the Smithfield Water Supply Board's hydraulic model, including updating of system wide water demand, performed hydrant flow tests to determine C-values throughout the system, model calibration, and build-out analysis for future demands in the system. Tasks also included determining potential upgrades to the system to accommodate future population in 20 years. Smithfield, RI.

- **East Smithfield Water Hydraulic Model Update:** Staff Engineer for an update to East Smithfield Water's hydraulic model, including updating of system wide water demand, performed hydrant flow tests to determine C-values throughout the system, model calibration and created a system map for East Smithfield Water. Smithfield, RI.

- **East Providence Water Main Cleaning and Lining:** Resident Construction Observer for the cleaning, lining and replacement of approximately 30,000 feet of water main in East Providence. The project includes providing support to the Water Department for the construction administration of a $4 million dollar rehabilitation project. East Providence, RI.

- **Main Street Water Main Replacement Project:** Resident Construction Observer for the replacement of approximately 5,200 feet of 10-inch asbestos cement water main with new 12-inch ductile iron pipe. Responsibilities included direct interface with the contractor, preparation of payment requests and overseeing the day-to-day construction activity. Upton, MA.

- **State Street Bank Office Park Utilities - Hydrant Flow Testing:** Staff Engineer performing hydrant flow tests on the Quincy campus of State Street Bank. As part of the utility and parking area upgrades, PARE performed hydrant flow tests to determine the available fire flow on the campus and also evaluated any upgrades necessary to meet fire flow needs. Quincy, MA.

- **Lakeside Commerce Center Water System Evaluation:** Staff Engineer for a study of the water supply system for Lakeside Commerce Center in response to inadequate fire flow for future development of the site. Project

included installation of pressure recording devices throughout the study area, hydrant flow testing and creation of a computerized hydraulic model to examine possible upgrades to the system to obtain necessary fire flow for the site. Johnston, RI.

- **Chandler Pond Waste Water Evaluation:** Staff Engineer performing sewer evaluation in response to failure of a wastewater pumping station, including evaluation of installing a new pumping station or possible repair of the existing pumping station, along with new 4" sewer force main. Brighton, MA.

- **Upton Station Street Pump Station Evaluation:** Staff Engineer for evaluation of wastewater pumping station in response to the station being oversized. Project included on-site evaluation, development of plans, and research and analysis of potential solutions to reduce the size of the current wastewater pumping station and upgrades to the station. Upton, MA.

- **Infiltration & Inflow Program:** Staff Engineer for development of Infiltration & Inflow (I&I) guidelines for the Department of Public Works. The guidelines are to be used by the sewer department and the Planning Board to develop a plan for elimination of I&I in the wastewater collection system. As part of the project three (3) critical lines were metered for the presence of I&I. Reporting to MADEP was also performed. Upton, MA.

- **Boy Scouts of America, Narragansett Council – Yawgoog Scout Reservation ISDS Repairs and Water Supply System Upgrades:** Staff Engineer for survey, design, and permitting of repairs to existing Individual Sewage Disposal Systems (ISDS) throughout the 1,800-acre Boy Scout Reservation. Hopkinton, RI.

- **Carpenter's Beach Meadows ISDS Repairs:** Staff Engineer for a geohydrological study and design of an Individual Sewage Disposal System (ISDS) repair for ISDSs at a site located in the vicinity of Matunuck Beach on the Atlantic Ocean containing approximately 280 two and three bedroom homes that are used seasonally from Memorial Day to Labor Day. Once constructed, the ISDS will include multiple large septic tanks and pump stations, a large leach field, and possibly nitrogen reducing technology. South Kingstown, RI.

- **NBC - Johnston Sewer Evaluation and Facilities Plan:** Staff Engineer for mapping the Town of Johnston's and the Narragansett Bay Commission's sewer system using Global Positioning System equipment to record the location of more then 1,500 manholes and inspect various manholes for pipe sizes and materials. Created mapping of drain basins for the Narragansett Bay Commission's interceptors for current and future development of the Town of Johnston. Johnston, RI.

- **Rhode Island Resource Recovery Corporation (RIRRC) General Landfill Consulting:** Staff Engineer for the on-call, resident contract to provide general engineering consulting for all operating improvements and facility expansions at the RIRRC Central Landfill. Johnston, RI.

- **Rhode Island Resource Recovery Corporation (RIRRC) Erosion and Sedimentation Control Consulting:** Staff Engineer for the on-call, resident contract to provide erosion and sedimentation control consulting for all of the RIRRC facilities. Johnston, RI.

Mark L. Dowdell
Engineer

PARE CORPORATION

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

EDUCATION

University of Rhode Island, B.S., Civil Engineering, 2009

RELEVANT EXPERIENCE

Mr. Dowdell has been involved in a number of water and wastewater projects since joining PARE in the summer of 2009. He has been responsible for hydraulic model entry and calibrations, groundwater monitoring, sewer and stormwater system design, report writing and preparation, and construction observation. Mr. Dowdell has a working knowledge of AutoCAD, WaterGems, InfoWater, STAAD Pro, and other technical computer programs. Relevant experience includes:

- **Southborough Hydraulic Model:** Staff Engineer responsible for the calibration and development of a computerized hydraulic model for the Town of Southborough's water system. The hydraulic model was utilized during the evaluation and design of upgrades to the Boland Booster Pump Station. Southborough, MA.

- **Bristol County Water Authority Hydraulic Model:** Staff Engineer involved in the development of a computerized hydraulic model for a water system serving approximately 16,000 customers. The system consists of four surface water reservoirs, two water treatment plants, an interconnection with the Providence Water Supply Board, four water storage tanks, two pump stations, and approximately 231 miles of pipe ranging in size from 1-inch to 30-inches in diameter. Barrington, Warren, and Bristol, RI.

- **East Smithfield Water District Hydraulic Model**: Staff Engineer responsible for the calibration and on-going maintenance of a computerized hydraulic model for ESWD. Task associated with this project include period hydrant flow testing, system map updating, and period development modeling and review. Smithfield, RI.

- **Greenville Water District Hydraulic Model:** Staff Engineer responsible for the maintenance of a computerized hydraulic model of the District's water system. This system is supplied by one interconnection to the Providence Water Supply Board and consists of three booster pump stations and a storage tank. Tasks associated with this role include an update of system demand, review and evaluation of the existing pump station on Mapleville Road, and the evaluation and sizing of pump station improvements. Smithfield, RI.

- **Town of North Kingstown Hydraulic Model:** Staff Engineer for the maintenance of the hydraulic model including the insertion of nodes and pipelines, and development of hydraulic data for the average day, maximum day, peak hour, and maximum summer day anticipated demands, and simulating capacity of system to serve proposed subdivisions and developments within the Town. North Kingstown, RI.

- **Greenville Water District Hydrant and Valve Mapping:** Staff Engineer responsible for the survey of the Greenville Water District and updates to the Greenville System Map. The survey included locating hydrants and water valves throughout the system utilizing a GPS unit. Smithfield, RI.

- **Rhode Island College Hydraulic Model:** Staff Engineer responsible for the development, calibration, and maintenance of a computerized hydraulic model for the Rhode Island College campus. Development of the model was based on survey data, hydrant flow tests performed on-site, and water use data. North Providence, RI.

- **Zambarano Hospital Elevated Storage Tank Rehabilitation:** Staff Engineer for the soil sampling, analysis, and remedial activities associated with contaminated soil beneath and around the 250,000-gallon elliptical elevated storage tank per RI Department of Environmental Management Remediation Regulations. Burrillville, RI.

- **East Providence Wastewater Design/Build/Operate Project:** Staff Engineer for the monitoring and analysis of groundwater along the East Bay Bike Path and Watchemoket Cove Pump Station. East Providence, RI.

- **United Water Rhode Island Underground Booster Pump Station – Design Build:** Staff Engineer for the design, permitting, and construction related services associated with the construction of a new underground booster pump station. South Kingstown, RI.

- **Water Storage Tank Construction Observation:** Staff Engineer involved in construction observation during construction of a 750,000-gallon elevated steel tank at the Mt. St. Charles Tank Farm. Woonsocket, RI.

- **Carpenter's Beach Meadows ISDS Repairs:** Staff Engineer for the design of an Onsite Wastewater Treatment System (OWTS) repair at an 18-acre site located in the vicinity of Matunuck Beach on the Atlantic Ocean which contains approximately 280 two and three bedroom homes that are used seasonally from Memorial Day to Labor Day. Once constructed, the OWTS will include multiple large septic tanks and pump stations, a large leach field, and possibly nitrogen reducing technology. South Kingstown, RI.

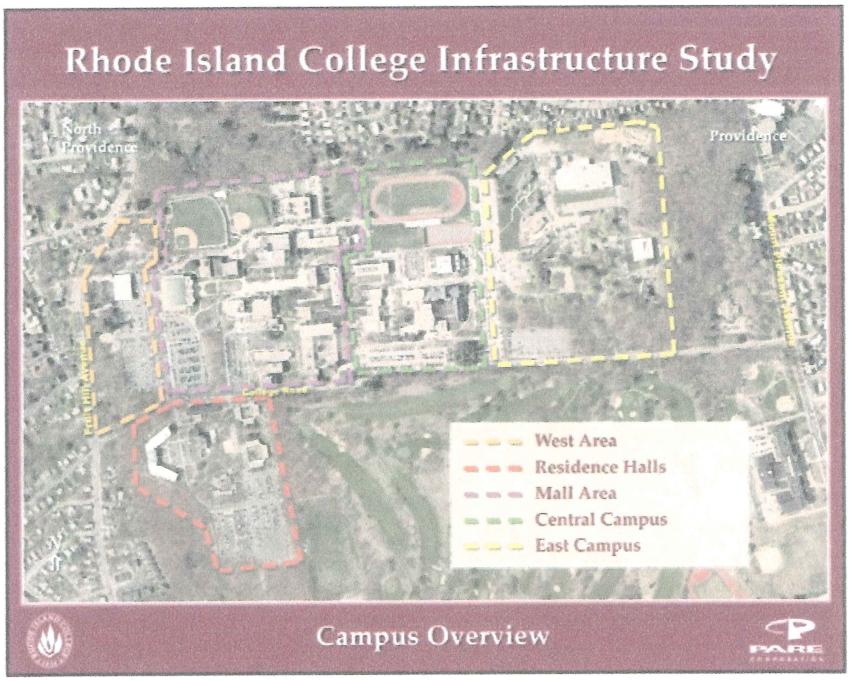
- **Groundwater Monitoring – Tiverton Landfill:** Staff Engineer for quarterly groundwater monitoring program, including detection and assessment monitoring per RI Department of Environmental Management Solid Waste Regulations. The monitoring program also includes surface water sampling and analysis, which is performed concurrently with the groundwater sampling. Tiverton, RI.

- **Rhode Island Resource Recovery Corporation (RIRRC) Phase VI Landfill:** Staff Engineer for the preparation of a permitting application for RIDEM review and approval for a proposed 103-acre lateral landfill expansion at the Central Landfill facility. Johnston, RI.

- **Alternate Cover Material Characterization and Acceptance:** Staff Engineer for the development of soil management plan to characterize and approve contaminated soil for use at the RIRRC as alternate daily cover material. Soil characterization includes soil sampling for physical and chemical properties. Approval included applying to the RIDEM for acceptance at the Landfill. Burrillville, RI.

- **Niantic Sportsman's Club – Surface Water Monitoring:** Staff Engineer for quarterly surface water monitoring program, including water sampling and analysis performed on lead impacted water. Niantic, CT.

PARE CORPORATION



Rhode Island College Infrastructure Master Plan

Providence, Rhode Island

Project Owner: Rhode Island College

Pare Corporation (PARE) was recently contracted by Rhode Island College (RIC) to perform a comprehensive review of all on-campus utilities and infrastructure and prepare an Infrastructure Master Plan. Infrastructure at RIC's 180-acre campus includes utility systems for electric, steam & condensate, water, sanitary sewer, natural gas, drainage systems, and communications/IT. Transportation infrastructure is also being evaluated, including roadways, parking lots and walkways.

PARE is addressing water and sanitary sewer systems, stormwater drainage, all transportation infrastructure, and is providing overall project management. A utilities subconsultant is providing expertise in the areas of electric, steam & condensate, natural gas, and communications/IT. The Project Team is developing a master map for each utility/ infrastructure system, as well as an overall campus infrastructure map.

An hydraulic model was developed to evaluate the water system with respect to system pressures, water quality, and fire supply. A theoretical wastewater loading and capacity analysis is being performed for the sanitary sewer systems.

The project will culminate with the development of an Improvement Plan for each utility system. Each utility system will be evaluated for a future usage period of 25 years. Recommended improvements will be outlined, compiled, ranked, and then prioritized over a 5-year period based on providing RIC with a schedule of improvements that yield the greatest return on investment from the standpoints of constructability and day-to-day operations.

Relevant Project Features:

- *Complete utility and infrastructure investigation, survey, and mapping.*
- *Water system hydraulic modeling.*
- *Sewer evaluation.*
- *Stormwater evaluation.*
- *Electric, steam & condensate, natural gas, and communications/IT evaluation.*
- *Preparation of Infrastructure Master Plan with 25-year Improvement Plan for each individual infrastructure system.*

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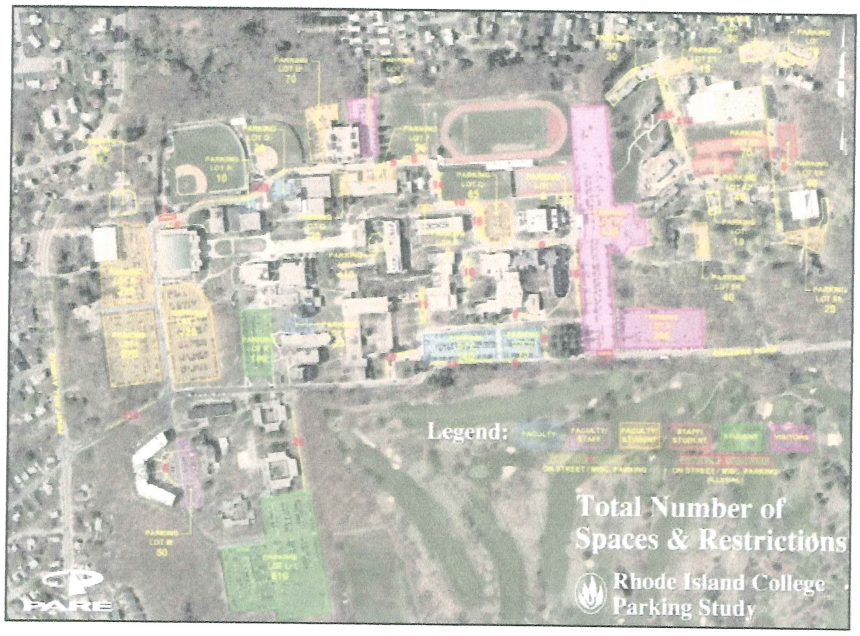


Rhode Island College – Master Plan Update

Providence, Rhode Island

Project Owner: Rhode Island College

Rhode Island College engaged Saratoga Associates to conduct its second campus-wide master plan. The first RIC master plan was completed in 1999. An update every decade is needed to identify and resolve competing contemporary needs for land and buildings as well as to receive recommendations for the highest and best use of limited space. PARE was a member of the Project Team selected in 2009 to update the Campus Master Plan. As a member of the team led by Saratoga, PARE provided civil, structural, and traffic/ transportation engineering services.

Structural engineers from PARE performed cursory evaluations of 32 buildings on the campus and provided brief descriptions and prioritized recommendations for each.

PARE catalogued and mapped all parking spaces on the campus as well as circulation patterns and pavement conditions. PARE also performed traffic counts and speed studies in order to assist with preliminary recommendations for improvements.

Relevant Project Features:

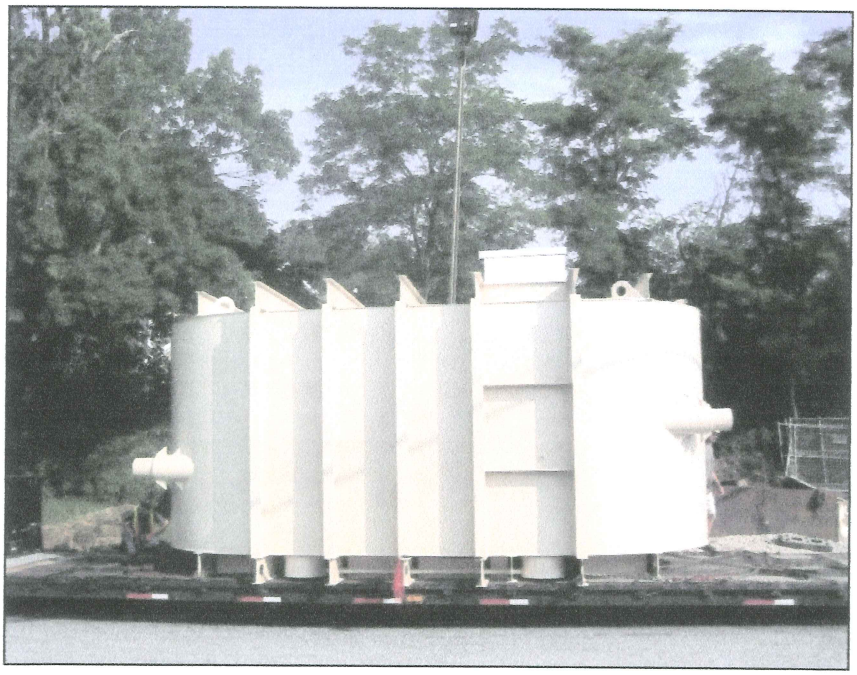
- *Campus Master Plan Update.*
- *Structural building evaluations.*
- *Pavement condition evaluations.*
- *Parking and circulation studies.*

PARE CORPORATION

Rt. 1 Booster Pump Station

South Kingstown, Rhode Island

Project Owner: United Water Rhode Island



Pump station before in-ground installation.

PARE, as a subconsultant to A.E. Bragger Construction Co., Inc., was retained by United Water Rhode Island, an independent water supply company providing potable water to the communities of Narragansett and South Kingstown, RI, as part of a Design/Build Project Team, to design and construct an underground booster pump station.

PARE performed a hydraulic analysis of the system, using United Water's hydraulic model, in order to determine the sizing for the booster pump station. PARE then prepared construction documents for an underground packaged booster pump station with three 500-GPM 7.5 hp pumps, a sump pump, an above-ground sample station, site improvements, and the required electrical, SCADA, and HVAC appurtenances. PARE also prepared the necessary permits to the Rhode Island Department of Transportation and Rhode Island Department of Health.

PARE provided construction services in the form of project management, review and approval of shop drawings, and construction observation during the installation of the underground booster station.

Relevant Project Features:

- *Hydraulic analysis and modeling of alternative scenarios.*
- *Design of booster pump station.*
- *Local and state permitting.*
- *Construction observation.*

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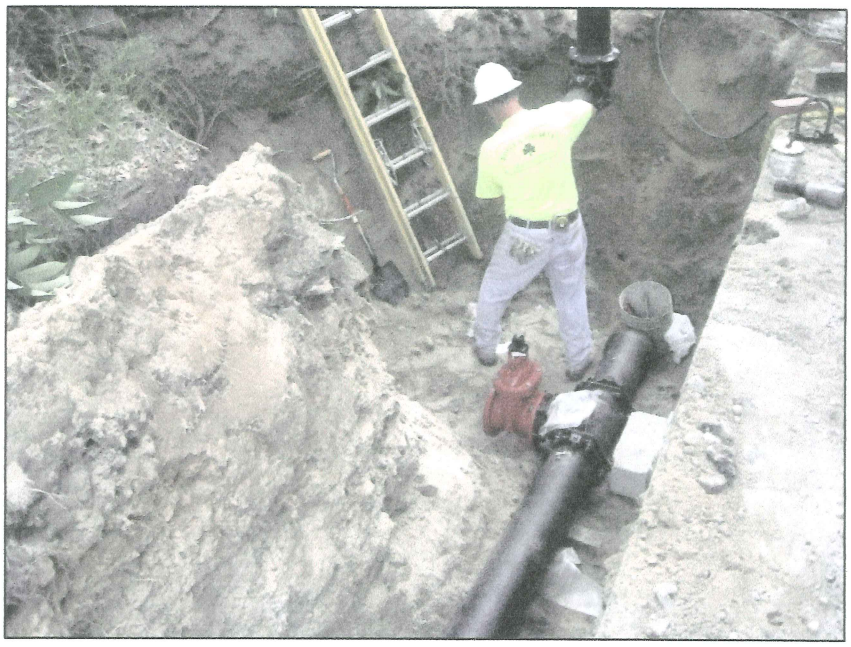


Higgins Street Water Main Replacement Project

Smithfield, Rhode Island

Project Owner: East Smithfield Water District

On behalf of the East Smithfield Water District, Pare Corporation evaluated and designed 1,700 feet of new 8-inch ductile iron water main in Smithfield, Rhode Island. The impetus behind the project was poor fire flow and the occurrence of discolored water in one area of the East Smithfield Water District. Through PARE's hydraulic analysis of the system, the root cause of the poor fire flow and discolored water was identified to be old and undersized piping in the Higgins Street neighborhood. In addition, the lack of system looping in this area was contributing to system problems.

PARE conducted a cost benefit analysis to identify an appropriate pipe size for fire protection and domestic service in the area. The obvious choice initially appeared to be 12-inch diameter ductile iron pipe. However, upon PARE's review of the pipe network in this area, it was determined that an 8-inch pipe would provide adequate fire flow while providing a less expensive installation than 12-inch. In addition, a new 12-inch pipe would likely be oversized relative to water turnover and water age, which could further exacerbate the aesthetic issues with water in this area.

PARE prepared design plans for the installation of the new 8-inch water main, coordinated with the Rhode Island Department of Transportation for areas within the RIDOT right-of-way, assisted the ESWD with bid administration, and conducted construction administration through the duration of the project.

Relevant Project Features:

- *1,700 LF of 8-inch water main installation.*
- *Provided new system loop.*
- *Improved fire flow to customers in the Higgins Street neighborhood.*
- *Project funded jointly by the ESWD and the RI Clean Water Finance Agency State Revolving Loan Fund.*

PARE CORPORATION

State Street Corporate Office Park Utility Improvements

Quincy, Massachusetts

Project Owner: State Street Bank

Pare Corporation (PARE) was retained to review the entire utility layout for the State Street South Office Park in Quincy, MA. Built on land filled in the 1970's, the utility infrastructure was beginning to show signs of settlement and failure. The project included the evaluation of the entire utility network for the site including water, sanitary sewer, storm drainage, site lighting, and telecommunications.

The water system exhibited a greater than normal break history and the evaluation resulted in a recommendation for replacement of the system. The design of the replacement included an alternatives analysis for pipe and backfill material to reduce settlements and accommodate anticipated future movement, as well as a study of future capacity and fire flow needs.

The investigation of the sewer system resulted in replacement and realignment to address existing slope concerns which had resulted in grease and sediment accumulation.

The stormwater drainage system frequently backed up, resulting in flooded lots. A drainage evaluation resulted in design modifications to prevent storm damage for up to a 25-year storm event.

The electrical system for the site lighting was not encased in a conduit so new electrical feed lines were designed.

Special project consideration was given to the impact of the tidal influence at the site, the observed and anticipated settlements due to the observed subsurface conditions, differential settlement across the site due to various foundation types, the high volumes of peak traffic, and the high value placed on uninterrupted utility service, especially high-speed telecommunications.

To facilitate the many complexities of allowable disturbances, the project is being phased over two construction seasons. The total project cost is expected to be approximately $5 million.

Relevant Project Features:

- *Evaluation of current and future flows.*
- *Review of video inspection of existing sewers.*
- *Traffic studies to facilitate construction during high peak traffic events.*
- *Geotechnical evaluation of subsurface conditions causing the observed settlements.*
- *Civil engineering of an innovative stormwater management system design.*
- *Geotechnical engineering to evaluate lightweight fill and other mitigation for compressible soils*
- *Coordination meetings with municipal agencies.*

PARE CORPORATION

Dean Estates & Garden Hills Pump Stations

Cranston, Rhode Island

Project Owner: Providence Water Supply Board

The Dean Estates and Garden Hills Pump Stations supply water from the Providence Water Supply Board to two separate service areas in Cranston. Both pump stations have a shortage in pumping capacity and redundancy, as well as have various structural and site deficiencies.

Originally the project called for upgrades to be performed to both pump stations. However, PARE identified that because both service areas were on the same hydraulic grade line and were separated only by a short section of missing water main, that it would be more economical to combine the two service areas and use one pump station. PARE performed a feasibility study and hydraulic evaluation, resulting in a preferred alternative of installing 600' of new water main to connect the two systems, including a section crossing Route 37 on the Glen Hills Road bridge.

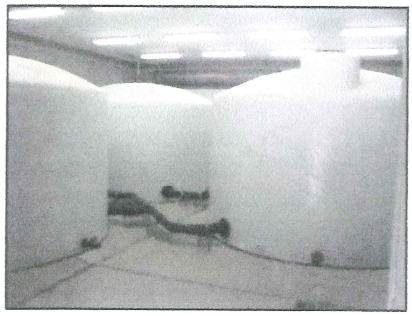
Other relevant features of the project included evaluation of pump vendors and pump skid alternatives, selection and design of a new pump skid using variable frequency drives (VFDs), electrical upgrades, structural upgrades, and site improvements to address occasional flooding at the Dean Estates Pump Station. The project also includes design and implementation of a temporary pumping system to be used during construction, as well as a demolition plan for the Garden Hills Pump Station. PARE also prepared contract documents, assisted the PWSB in bidding, and will provide resident construction observation.

Construction is anticipated to begin in Fall 2010 and be completed in 2011.

Relevant Project Features:

- *Existing condition surveys of both pump stations*
- *Feasibility study for combining two separate service areas including hydraulic evaluation of PWSB system*
- *Evaluation and selection of a preferred pump skid*
- *Design of structural, civil, electrical, mechanical, and SCADA upgrades*
- *Design of water main extension including bridge crossing over RI Route 37*
- *Preparation of contract documents and assistance during bidding*
- *Resident observation during construction.*

PARE CORPORATION



Exterior and interior of Legiontown Pump Station.

Burlingame State Park Water Supply Distribution System Improvements

Charlestown, Rhode Island

Project Owner: Rhode Island Department of Environmental Management

Pare Corporation (PARE) was retained by the Rhode Island Department of Environmental Management (RIDEM) to design the replacement of the majority of the Burlingame State Park water distribution system. The system services about 700 acres of the existing camping sections of the park. One new water supply well is being developed to augment the existing wells, which will be renovated and cleaned. A new water storage facility was constructed at a centralized location to receive water from both the existing and new supply wells.

PARE's services included determining the best location for the new well and storage facility; design of a new gravel packed well and new pumping station with a duplex pumping design arrangement for back-up pumping; complete rehabilitation of existing pumping facilities including new pump installations and all associated mechanical equipment; water and electric utilities for camping sites within the Mills Camp area; auxiliary power for the pumping stations; drain facilities to dewater the system during the winter season; new transmission piping from the existing and new water supply wells to the water storage tank; replacement of all existing transmission mains; water spigot installations spaced every 15 to 20 campsites; and new fire hydrant installations at both the Entrance Station and the new water storage tank.

PARE coordinated early on with the applicable state regulatory agencies to review in advance the overall procedures and requirements for this project. PARE's environmental scientists flagged the wetlands in the proposed investigation and construction areas and prepared the necessary regulatory submissions. PARE also coordinated the efforts of a team including a surveyor, an archaeological expert, a hydrogeologist, electrical and mechanical engineering subcontractors, and a well drilling subcontractor.

Relevant Project Features:

- *Development of new potable well and pumping station.*
- *Renovations of three existing well.*
- *Siting and design of new water storage tank.*
- *Replacement of more than10,000 linear feet of transmission mains.*
- *Wetlands, geotechnical, archaeological, and hydrogeological investigations.*
- *Regulatory permitting.*
- *Construction-phase services.*

PARE CORPORATION

Water Main Cleaning and Lining Construction Observation

East Providence, Rhode Island

Project Owner: City of East Providence

Pare Corporation (PARE) was retained by the City of East Providence to assist them with their cleaning and lining program. While the City did the project design themselves, they relied on PARE to provide construction administration and observation services. PARE has been on-site full-time since September 2009 conducting construction observation. During that time, PARE has been responsible for documenting construction progress, coordinating between the owner and the contractor, field verifying existing conditions, documenting discrepancies in system mapping and field conditions, and providing technical input and engineering services as needed.

Some of the construction administration services provided by PARE include shop drawing review, contractor payment requisition review and approval, and field documentation. PARE also provided quality control review through field measurements of pipe lining, oversight of temporary bypass piping, and review of disinfection and pressure testing results.

As part of the contract, PARE provided engineering services to address certain unforeseen field conditions. Given the density of the City streets, some streets have a significant number of utilities beneath them. This made thrust restraint on existing and new piping difficult. PARE was able to provide innovative and unique thrust restraint designs that provided adequate protection to the water system while fitting into some relatively tight locations. PARE was also able to provide evaluation and design services for maintaining adequate clearance around sanitary sewer lines, and where necessary, encasement advice for water and sewer.

Much of this project was funded through the American Recovery and Reinvestment Act (ARRA) of 2009. As such, PARE assisted the City with the paperwork and compliance requirements established through the ARRA program, particularly the certified payroll requirements and the Buy American provision of the act.

Relevant Project Features:

- *Conducted full-time construction observation*
- *Reviewed shop drawings and contractor request for information.*
- *Provided engineering support during construction.*
- *Reviewed and processed contractor payment requests.*

PARE CORPORATION

New Well Pump Station # 11

North Kingstown, Rhode Island

Project Owner: Town of North Kingstown

The Town of North Kingstown Division of Water Supply selected Pare Corporation to design a new well pump station. The pump station was required in order to allow the connection of a newly-installed potable water well to the Town's water distribution system.

PARE coordinated with a surveyor for existing conditions drawing and elevations, reviewed the Well Development Report for the new well, and performed hydraulic modeling in order to determine sizing and selection for the new well pump.

PARE was responsible for site design (road access, parking, security lighting, fencing, etc.), building structure (foundation, electrical service, HVAC system), mechanical process equipment (pumping equipment, control valves), connection to the distribution system, SCADA instrumentation and control system, and potable water treatment system.

PARE also prepared all permitting applications including RI Department of Health Division of Drinking Water Quality, Ten State Standards, RI Building Code, RI Fire Safety Code, and all applicable Town codes and regulations.

PARE prepared construction documents, assisted the Town in the bidding process, and provided construction observation.

Relevant Project Features:

- *Design of new well pump station.*
- *Access and site design.*
- *Regulatory permitting.*
- *Construction-phase services.*

Rhode Island College
Cement Water Main Replacement
& Booster Pump Station D/B

Providence, Rhode Island
RFP # 7448088

PREPARED BY:

PARE

PARE CORPORATION
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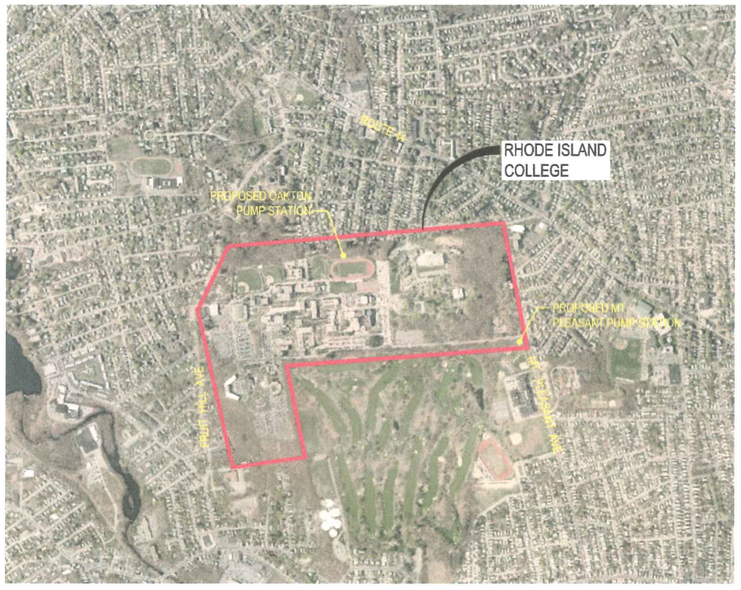
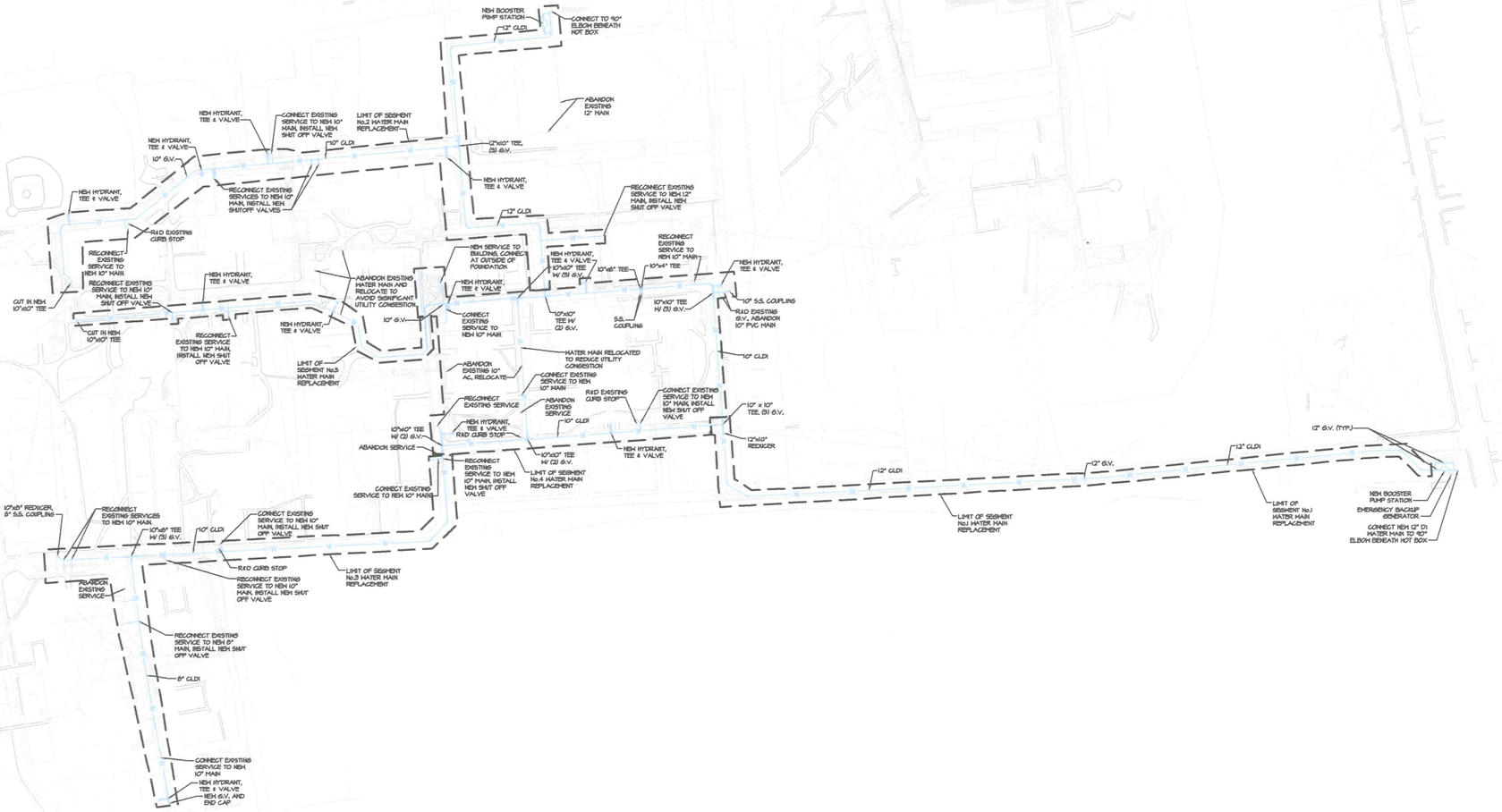
LINCOLN, RI 02865
401-334-4100



SCALE: 1"=2000'

INDEX OF DRAWINGS

JANUARY 2011



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Rhode Island College Cement Water Main Replacement & Booster Pump Station D/B

Providence, Rhode Island

SCALE:	N.T.S.
DATE:	JANUARY 2011
PROJECT NO.:	EP360.10
DESIGNED BY:	TPT
DRAWN BY:	AKL
CHECKED BY:	BFE

FIGURE NO.

Overall Plan Segment No.1-5

10
JOSEPH F.
KAUFFMAN
CENTER

12" G.V. (TYP.)

12" CLDI

12" G.V.

LIMIT OF SEGMENT
No.1 WATER MAIN
REPLACEMENT

NEW BOOSTER
PUMP STATION

EMERGENCY BACKUP
GENERATOR

CONNECT NEW 12" DI
WATER MAIN TO 90°
ELBOW BENEATH HOT BOX

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Rhode Island College Cement Water Main Replacement & Booster Pump Station D/B

Providence, Rhode Island

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DRAWN BY:	AKL
CHECKED BY:	BFE

FIGURE NO.

Segment No.1 Water Main Replacement

SHEET 1 OF 2

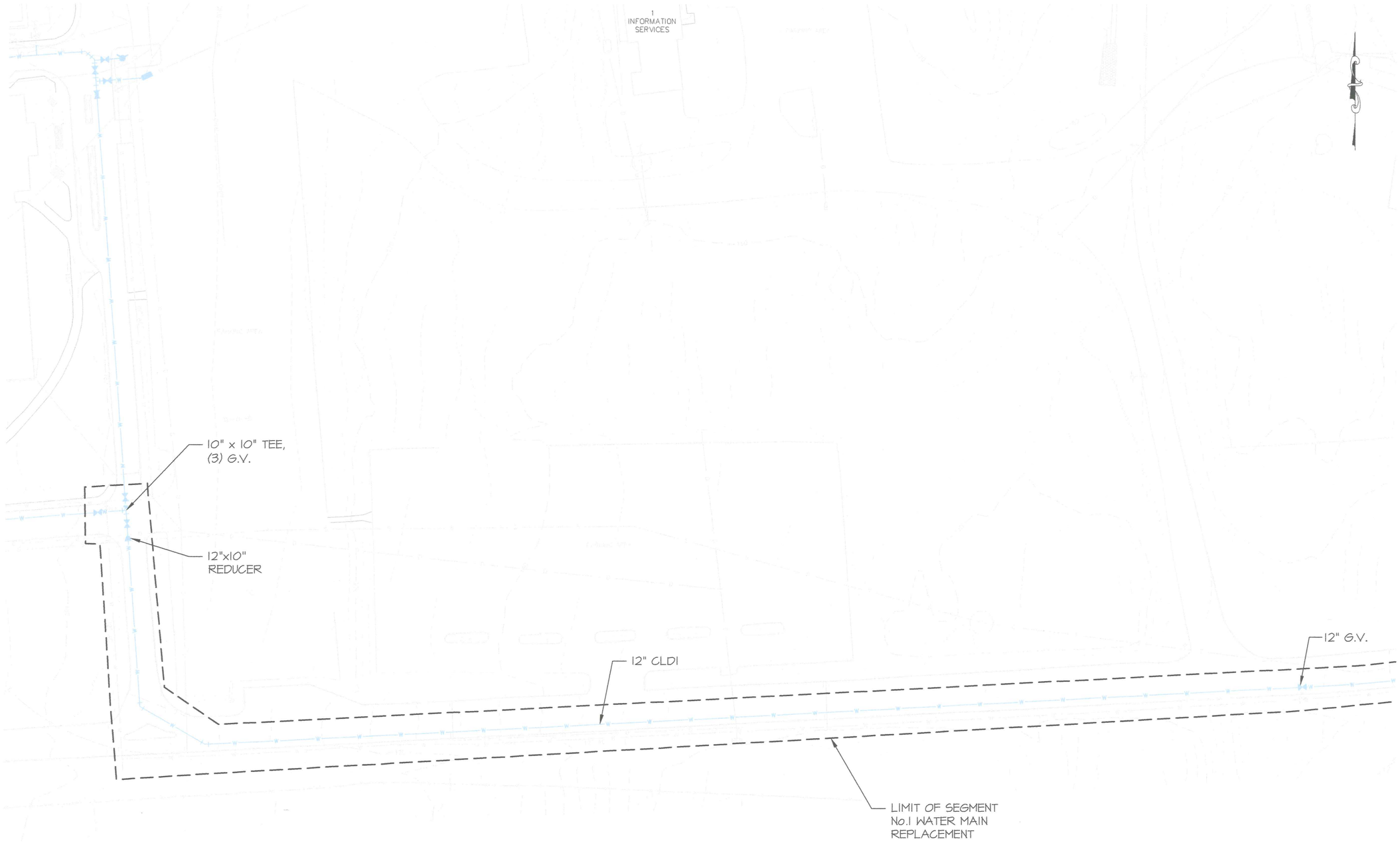

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FIGURE NO.

Segment No.1 Water Main Replacement

SHEET 2 OF 2

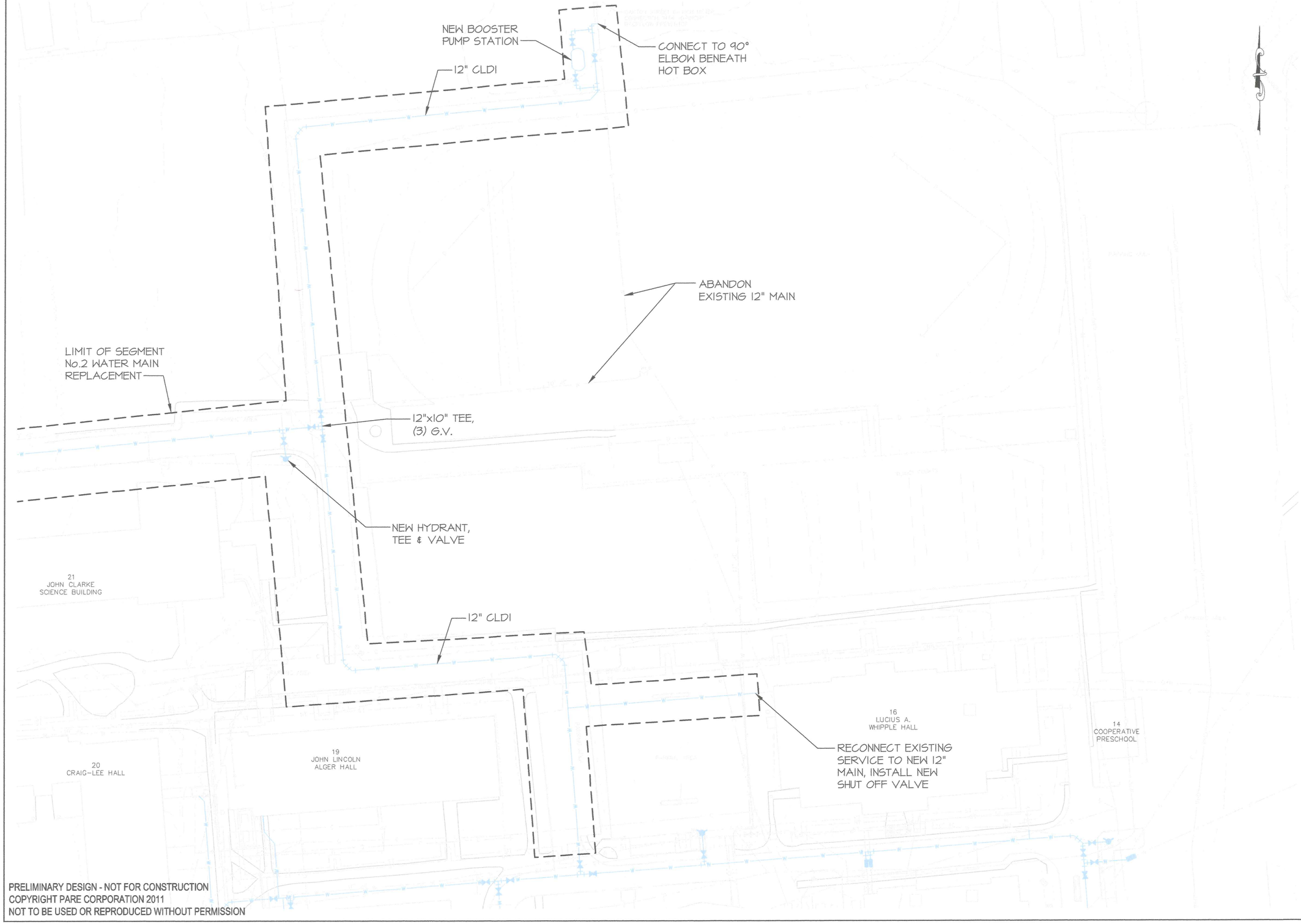

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FIGURE NO.

Segment No.2 Water Main Replacement

SHEET 1 OF 2

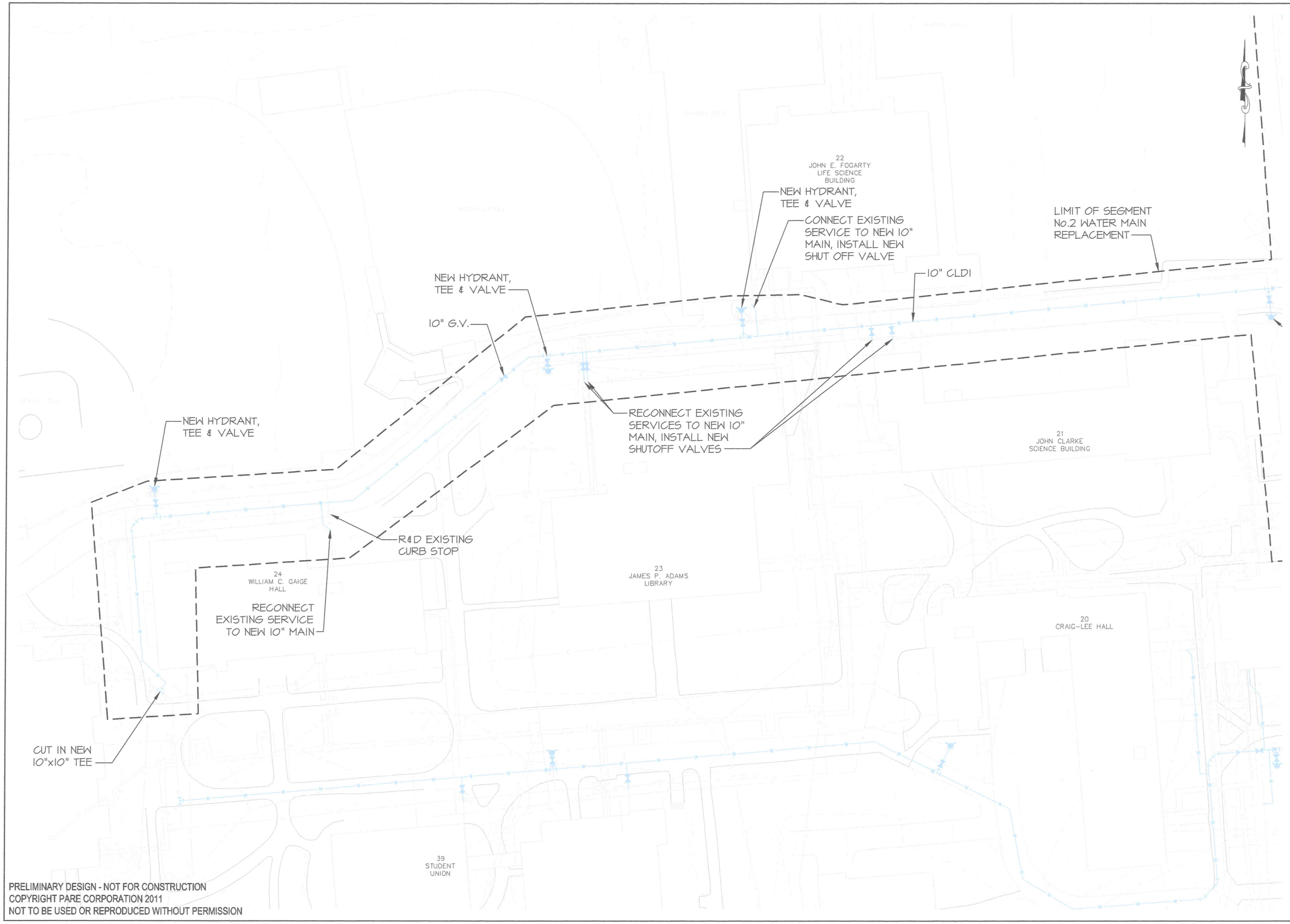

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FIGURE NO.

Segment No.2 Water Main Replacement

SHEET 2 OF 2

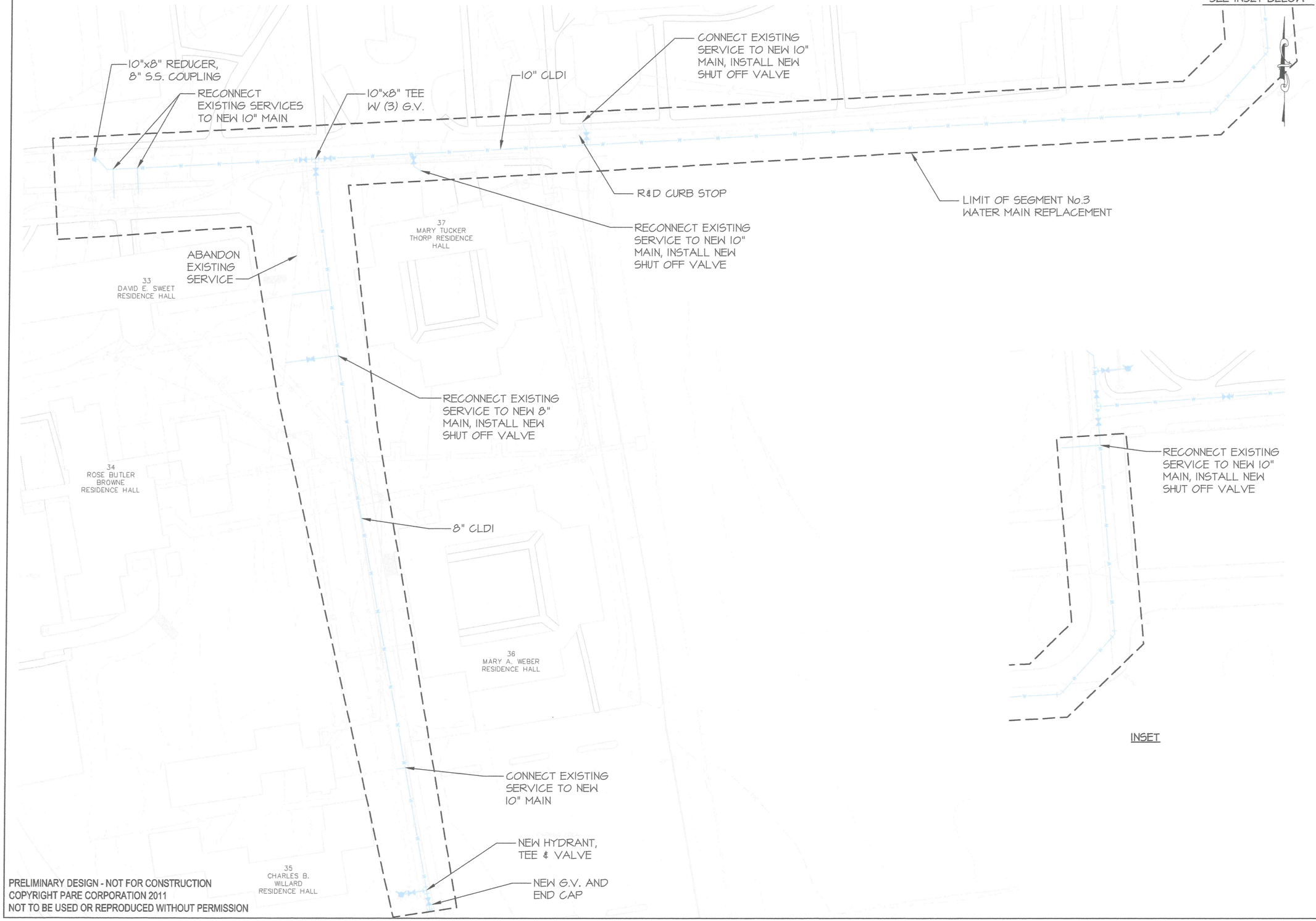

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FIGURE NO.

Segment No.3 Water Main Replacement

20
CRAIG-LEE HALL

19
JOHN LINCOLN
ALGER HALL

NEW SERVICE TO BUILDING, CONNECT AT OUTSIDE OF FOUNDATION

NEW HYDRANT, TEE & VALVE

10"x10" TEE W/ (3) G.V.

NEW HYDRANT, TEE & VALVE

10"x6" TEE

16
LUCIUS A.
WHIPPLE HALL

RECONNECT EXISTING SERVICE TO NEW 10" MAIN

10"x4" TEE

14
COOPERATIVE
PRESCHOOL

NEW HYDRANT, TEE & VALVE

10" G.V.

CONNECT EXISTING SERVICE TO NEW 10" MAIN

10"x10" TEE W/ (2) G.V.

S.S. COUPLING

10"x10" TEE W/ (3) G.V.

15
JOHN NAZARIAN
CENTER FOR
PERFORMING ARTS

10" S.S. COUPLING

R&D EXISTING G.V., ABANDON 10" PVC MAIN

WATER MAIN RELOCATED TO REDUCE UTILITY CONGESTION

10" CLDI

ABANDON EXISTING 10" AC, RELOCATE

CONNECT EXISTING SERVICE TO NEW 10" MAIN

18
ART CENTER

17
DENNIS J.
ROBERTS HALL

R&D EXISTING CURB STOP

RECONNECT EXISTING SERVICE

ABANDON EXISTING SERVICE

CONNECT EXISTING SERVICE TO NEW 10" MAIN, INSTALL NEW SHUT OFF VALVE

NEW HYDRANT, TEE & VALVE

10" CLDI

10"x10" TEE W/ (2) G.V.

R&D CURB STOP

ABANDON SERVICE

NEW HYDRANT, TEE & VALVE

10"x10" TEE W/ (2) G.V.

LIMIT OF SEGMENT No.4 WATER MAIN REPLACEMENT

CONNECT EXISTING SERVICE TO NEW 10" MAIN

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FIGURE NO.

Segment No.4 Water Main Replacement

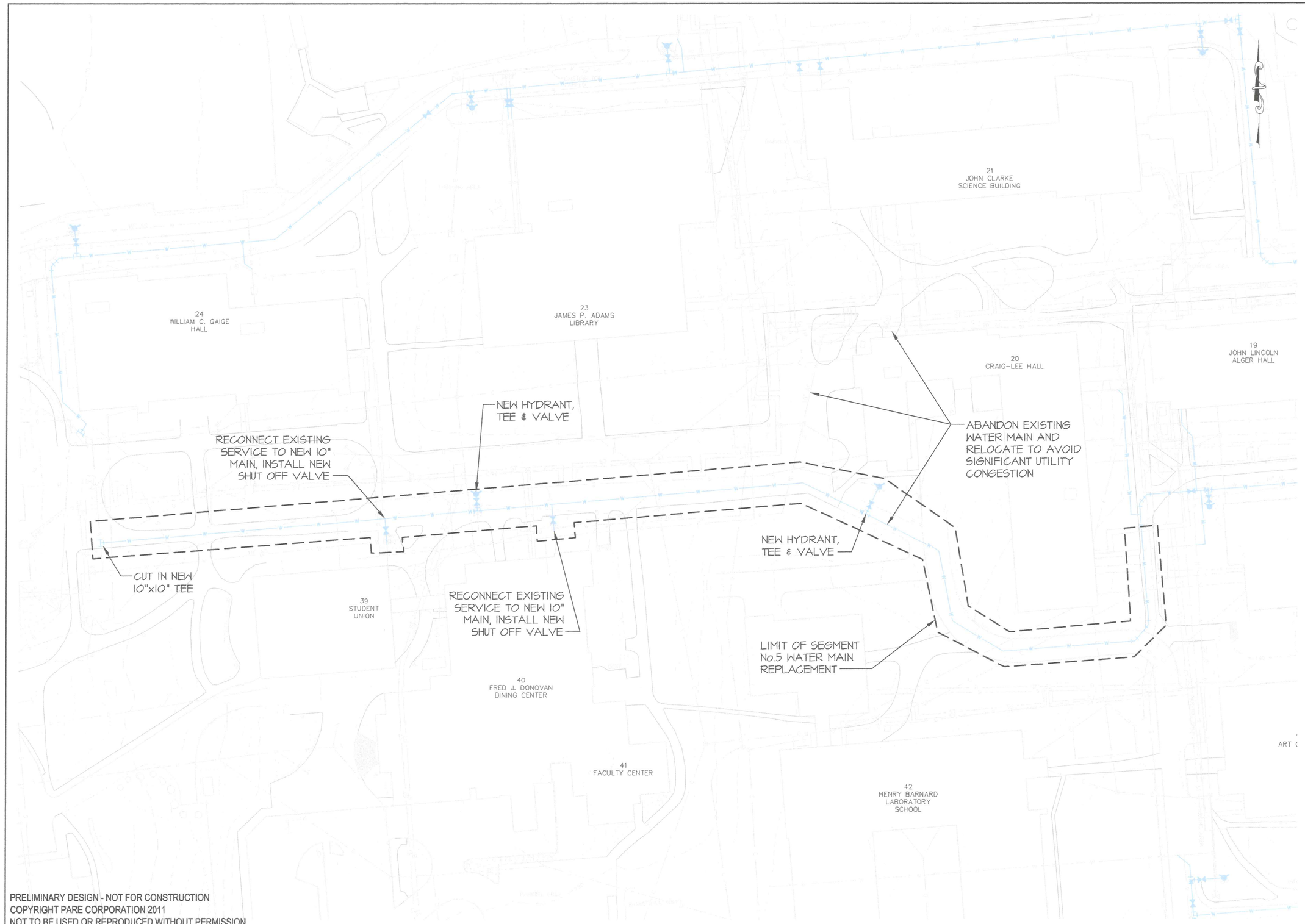

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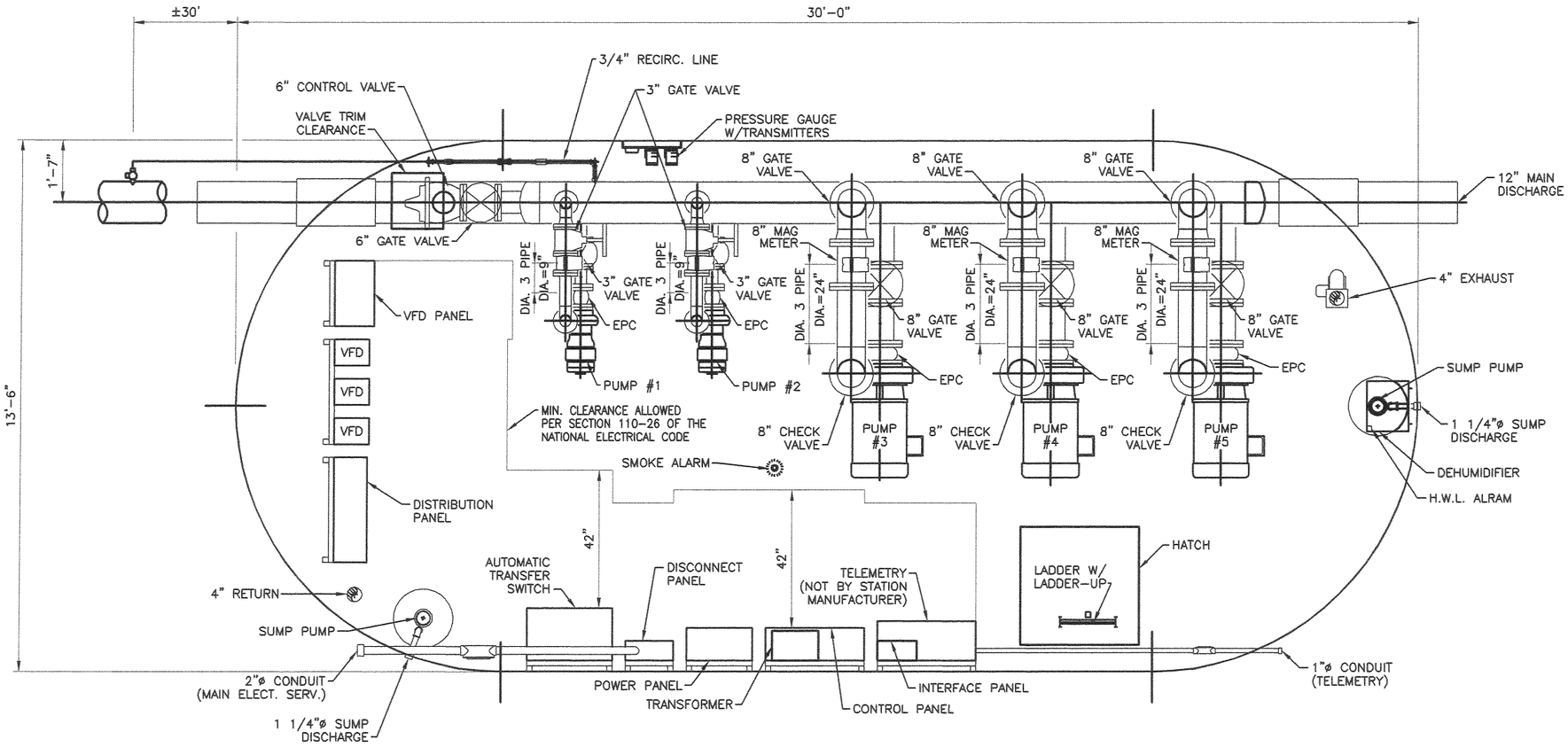
FIGURE NO.

Segment No.5 Water Main Replacement



INTERIOR PLAN

NOTES:

1. THIS STATION DESIGN IS TYPICAL FOR BOTH MT. PLEASANT AVENUE AND OAKTON STREET. FINAL LAYOUT AT EACH WILL BE DETERMINED DURING DESIGN.
2. STATION LAYOUT IS BASED ON AN ENGINEERED FLUID INCORPORATED PACKAGED PUMP STATION.

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FIGURE NO.

Typical Booster Pump Station Layout